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ABSTRACT

Intended for educators interested in providing peace and nuclear war education in the public schools, this publication examines the nature of peace and nuclear war education, rationales for its inclusion in the public school program, and ways to deal with the controversial nature of the topics. The first of eight chapters presents a four-fold rationale. Peace and nuclear war education are considered appropriate content for (1) developing reflective and competent young adults, (2) increasing the relevancy of peace- and nuclear war-related content in today's world, (3) addressing psychological concerns of students, and (4) preparing young adults for civic involvement. Chapter 2 defines peace and nuclear war education and addresses commonalities between the two. Chapter 3 presents a rationale and criteria for teaching controversial issues. Chapter 4 examines biased and unbiased instructional materials, personal beliefs, age appropriateness, teaching methods, infusion of peace and nuclear war education into the middle school, junior high, and elementary school curriculum, and some helpful teaching hints. Materials and instructions for a curriculum materials analysis system are provided in Chapter 5. Chapter 6 gives suggestions for dealing with school and district level resistance to the political and controversial nature of peace and nuclear war topics. Annotated citations for over 20 teaching resources in Chapter 7 are followed by five concluding challenges in Chapter 8. A list of over 50 related references concludes the publication. (LH)

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TEACHING ABOUT PEACE AND NUCLEAR WAR: A BALANCED APPROACH

by

John Zola and Jaye Zola

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FOREWORD

John Zola and Jaye Zola have had many years of classroom teaching experience. They are well qualified to present materials and viewpoints that can be useful to other classroom teachers in dealing with a subject that they feel is of utmost importance--education about peace and nuclear war.

The subtitle of the volume--"A Balanced Approach"--points to the fact that a variety of views and materials have been described which can be used in teaching their subject. It does not indicate a neutral attitude about whether the subject should be taught at all. They believe that it is imperative that students be exposed to issues and viewpoints related to peace and nuclear war. They reject the view that such matter should be avoided because of its controversial nature, or because it might lead students to question prevailing views.

The ERIC Clearinghouse for Social Studies/Social Science Education is pleased to make this publication available to teachers and curriculum planners, as a part of its program of analyzing and synthesizing materials, many of them drawn from the ERIC system, which deal with current topics of importance to social studies education.

Irving Morrissett
Director, ERIC Clearinghouse for
Social Studies/Social Science
Education, and
Executive Director, Social Science
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We would also like to thank our parents who gave us the love of learning and optimism to become teachers and work for a world at peace. This book is dedicated to them, our families, and, most importantly, to our children who we hope will grow to be peace makers and involved citizens.

John Zola and Jaye Zola

Chapter 1

A WORLD WITH NUCLEAR WEAPONS: CHALLENGES AND OPTIONS

Representatives of all realms of the political and educational spectra have expressed opinions about the role of nuclear weapons in our society, and about the issues that they present to us as both Americans and global citizens. The vast majority of Americans would agree that nuclear war must be avoided. However, an overwhelming consensus is absent in regard to the question of how to avoid nuclear war. There is also little agreement about what role education should play in addressing issues related to avoiding nuclear war.

A variety of experts has commented on the nature of nuclear weapons and on the ways that they have changed the world. Albert Einstein said that "the unleashed power of the atom has changed everything save our modes of thinking and we thus drift toward unparalleled catastrophe." President Eisenhower commented that "the era of armaments has ended and the human race must conform its actions to this truth or die." General Douglas MacArthur warned that "global war has become a Frankenstein to destroy both sides. No longer is it a weapon of adventure--the shortcut to international power. If you lose, you are annihilated. If you win, you stand only to lose....[War] contains now only the germs of double suicide." George Kennan, an expert on Soviet-U.S. relations, has described the atomic bomb as "the most useless weapon ever invented." Each of these individuals--with diverse ideological backgrounds--has agreed that nuclear weapons have significantly changed the world, and that this reality must be faced by all of us.

Within this context, what is the role of the "average citizen" in addressing this topic? Until very recently, national security has been left to defense and foreign affairs professionals who have not sought input from an informed citizenry. National security has been considered too complex and technical an area for lay involvement. This "conspiracy of silence" (Berman 1983) has certainly not contributed to the robust spirit of debate envisioned by our Founding Fathers.

Today teachers and students are barraged by the media and political and religious organizations with assertions about matters of defense, nuclear arms, peacemaking, and national security (Hoguet 1984, 4). One

must ask to what degree teachers and students are prepared to confront the many conflicting pieces of information that they receive, and to what extent they can contribute to our democratic traditions. Former Admiral Gene R. LaRocque (1983, 2) captured this sentiment when he wrote, "I have been concerned for many years that Americans do not appreciate the danger of nuclear war. For decades governments have cloaked the dreadful reality of nuclear war and nuclear weapons in reassuring and soothing language." If such is the case, then steps must be taken to create an informed citizenry that can contribute to basic policy decisions from a perspective grounded in accurate information.

We have stated that there is little agreement on the role of education in addressing the issues of nuclear war and nuclear weapons, and even less agreement on whether nuclear weapons can help humankind avoid nuclear war. It is quite clear that a number of conflicting assumptions underlie the related controversies. When determining the policies that this country should subscribe to in regard to nuclear issues, careful consideration must be given to the following questions. First, is nuclear war education in the best interests of students and the nation? Second, to what degree can society influence national security decisions? And third, does a democracy require complete information be disseminated on all issues? Without answers to these and other questions, teachers have meager rationale indeed for teaching controversial issues such as those related to nuclear war. It is the intent of this book to address such questions within the context of the nation's educational system.

Two opposing views of the role of nuclear weapons dominate our society's thinking. Some see nuclear weapons as the keepers of peace--as the tools that have prevented a global war from erupting since World War II. They believe that these weapons provide a balance between East and West, maintain the system of deterrence, and that the atomic weapons "genie" is forever out of the bottle. In an imperfect world, nuclear weapons maintain an imperfect peace, especially when the West is confronted with an adversary of the size, power, and aggressiveness of the Soviet Union (see for example, A Strategy for Peace Through Strength, the American Security Council Foundation). Others believe that nuclear weapons are not a deterrent to war, and that as long as they are main-

tained in the world's arsenals, the chance for mass destruction of humankind exists. They believe that nuclear weapons have created a situation of massive overkill, and that they provide a self-sustaining momentum to ever larger and more destabilizing arms, to fear and distrust between the superpowers, and to an ever increasing chance of nuclear holocaust by accident or design. Proponents of this view believe that significant reductions in nuclear arsenals and development of a trust relationship between East and West are the only ways by which the genie can be confronted.

Clearly, this description reduces the nuclear dilemma to polar opposites--to black versus white, with little consideration of gray areas. It is this reality and polarization that peace and nuclear war educators must address. Only through effective, responsible, and creative education can the viewpoints of adversaries give way to visions of a world where nuclear war is less of a fear and threat. The question has been asked, "Are you a liberal or a conservative if you're afraid of the Russians and equally afraid of the arms race?" (Wagner 1985). Are not some of the most compelling challenges facing education and society as a whole today to think in less dualistic terms, to have a vision of a world where both nuclear holocaust and foreign aggression are less likely, and to find new ways out of old problems? We believe that they are, and offer this book as one resource for addressing them.

A Rationale for Peace and Nuclear War Education

At its best, teaching is a conscious act within well defined parameters. Parents and community members are certainly justified in asking what teachers teach and the reasons that a particular subject or content area is taught. For this and other reasons, a rationale for peace and nuclear war education is a primary need of today's educators. What purpose does a rationale serve? It is "the vehicle through which the educator justifies to the community at large his or her use of the power that the community has delegated to institutions of formal education" (Newmann 1977, 31). Educators have an intellectual and ethical obligation to build more complete rationales of this kind, and nowhere is this more important than in the area of peace and nuclear war education.

In reviewing the literature on peace and nuclear war related education, several themes appear that are used to justify the inclusion of this content in the school curriculum. Briefly, these are: (1) a relationship to the general goals of education that focus on the development of capable, thinking, competent young adults; (2) the "relevancy" issue, where peace and nuclear war issues are seen as paramount concerns that must be addressed in institutions of learning; (3) the psychological concerns related to young people growing up in the shadow of a potential nuclear holocaust; and (4) the notion that a primary task of education is preparation for civic or citizen involvement in our democratic processes. Each of these themes has value, and together they can form a potent rationale for the inclusion of peace and nuclear war education in the public school curriculum.

Before examining these four themes in greater detail it should be mentioned that there is a synergistic relationship among them. Alone, each may not be considered a strong enough rationale for including peace and nuclear war education in school curricula. Together, however, they build a solid foundation for teaching this content and skill area. To push for a major and controversial realignment of a school curriculum solely because a given issue is relevant is a narrow approach indeed, for today's relevant issue is often passe tomorrow. Also, to insist that psychological pressures faced by children are reason enough to restructure school programs may lead to criticism based on the proper role of public education in addressing the spiritual concerns of young people. If the primary goal of peace and nuclear war education is to prepare students for involvement in our democracy, it could be said that we are currently doing this, and that to be effective, such preparation need not be content-specific. In addition, the development of competent learners does not automatically justify peace and nuclear war courses or units because competency in learning is, again, not content-specific. Indeed, it has been maintained that "a high quality, general, liberal education makes separate and distinct curriculum additions unnecessary because it prepares students to cope with a myriad of social, global, and ethical issues" (Gaddy and Kelly 1983, 39). All of these thoughts and arguments must be taken into consideration when presenting a plausible rationale for teaching about peace and nuclear war.

General Goals of Education

Any rationale for refocusing our educational goals must in some way relate to the societal consensus on the overall mission of public education and schools. According to participants at the Wingspread Conference on Nuclear Arms Education in Secondary Schools, "The general mission of public education is to equip students with knowledge, skills, and values to become fully participating members in a democratic society. Such participation involves the ability to investigate and to analyze public policy issues and to make informed judgments about such issues" ("Nuclear Arms Education in Secondary Schools" 1985, 7). The report goes on to state that an increasingly important issue is national security in the nuclear age and that these topics thus have a definite place in school curricula.

The notion that the overriding purpose of education is to develop informed, thinking citizens capable of participating in domestic and world affairs is reflected in The Essentials Statement (1980) endorsed by such organizations as the national councils for teachers of English, social studies, mathematics, and science; the national associations for elementary and secondary principals; and numerous other organizations. According to this statement, students must develop an appreciation of the interdependence of our world, be able to deal with critical issues and the world as it really is, make decisions consistent with American principles, and understand ways of managing conflict consistent with democratic procedures.

A related mission of education in general has to do with helping students to discover their places in the "great scheme of things," in the world about them, and in the broad sweep of history of which they are a part. "Education should aim to provide students with a sense that history is not inevitable and that what this country is and becomes is our choice as citizens" (Snow and Goodman 1984, 328). As young people progress through the educational system, it is important that they begin to see themselves as actors in--rather than observers of--history.

Education also seeks to help students become critical thinkers. A critical thinker is a person who cannot be deceived or manipulated by leaders or the media, one who reaches informed conclusions, is able to justify decisions to others, and is aware of assumptions and the role

played by limited information and selective perception (Newmann 1977, 6). A student who is capable of critical thinking is able to "live with discomfort" (Snow and Goodman 1984, 326) and is aware that often the more we know, the more complicated, frustrating, and depressing things can appear. Such realities provide challenges for the student who has been educated in the manner suggested by these ideas of the general purposes of education.

What does this imply for the role of peace and nuclear war education? Quite simply, if the overriding purpose of schooling in our society is to create well informed, competent, thinking, proactive young people, then this content area is an appropriate vehicle for achieving those goals. Peace and nuclear war education facilitates critical thinking processes while presenting content that can help students at all grade levels see their places in the sweep of history and in the world. Education can be a crucial tool in unlocking the great human potential that must be released if we as a people are to honestly and effectively address the nuclear dilemma that so significantly affects our present society.

Civic Education

Intimately related to the general purposes of education in the United States is the role of civic education in a democracy. In fact, these two notions go hand in hand, as illustrated by the beliefs of Thomas Jefferson and the nation's founders, who held that citizenship was a privilege that required its holders to educate themselves, to be aware of public issues, to seek the common good and, above all, to participate. Citizenship education is, unarguably, a key component of our democratic traditions.

Citizenship education carries with it several basic assumptions. These include the notions that education should not teach students what to think, but rather how to think; that schools should not indoctrinate, but rather inform; that the status quo may be questioned, but not blindly destroyed; that informed and reflective thinking on issues is preferable to knee-jerk and irrational thinking; that issues worthy of debate in the halls of decisionmakers are worthy of debate and discussion in the school and community; and, that participation in democratic processes is a vital activity that all citizens must engage in.

The importance of the relationship between citizenship education and peace and nuclear war education cannot be minimized. Those who prepare children for the duties of citizenship, those who are arriving at the age of active involvement in democratic processes, and those who are still in the public school system must know the facts and realities of the nuclear age. They must also be able to deal with the issues and controversies that arise from basic facts and to learn skills for interpreting numerous claims and counter-claims related to peace and nuclear war content. Schools are not all-powerful and cannot be turned to every time there is an issue on the public agenda, but, as we have discussed, they can and should have some consistency in basic purpose and mission. Linking the notion that schools are institutions of and for democracy with the importance of teaching about peace and nuclear war is logical and consistent with the tradition that public education is for the good of society.

Feelings of helplessness and accompanying disillusionment with social institutions have become more prevalent as more people learn about or are confronted with such issues as limits to growth, environmental concerns, population pressures, widespread hunger, diminishing resources, and nuclear weapons. Although these issues are formidable, they are also manageable if challenged by the most creative and disciplined thinking of present and future citizens. Peace and nuclear war education seek to provide the content and skills that will allow young people to look at large problems with a sense that solutions can be found and participation can bring change. We believe that such attitudes are what democracy--and education--should be about.

Relevancy

Relevancy speaks to the notion that change must be addressed in school curricula and that students often have a legitimate desire to see connections between what goes on in school and what goes on in the world. Not all that happens in a school, however, must be relevant within this definition; much that is taught in schools is done so with the intention of building a storehouse of content and skills for future use and the pursuit of lifelong learning. Thus, a balance must exist within our school programs between that which is immediately relevant

and that which appears to be unconnected to the world and desires of the student. "Immediate relevancy" would exclude too much that is crucial in the building of fundamental content and skills for students.

There is also a legitimate concern that the avoidance of peace and nuclear war related information and skills is detrimental and unfair to this and future generations. The issues of peace and nuclear war touch every person and all aspects of our lives. These issues affect our economy, our perceptions of other nations, our attitudes towards leaders, our perceptions of the future, and our definitions of ourselves. In reality, there is very little that is completely outside the realm of nuclear weapons or the effects of the nuclear age. In the words of the University of Notre Dame's Father Theodore Hesburgh, "The world's other problems become meaningless if we don't solve this one--and do it quickly." Such statements do not in any way imply a course of political action to solve this problem, rather they speak to the urgency surrounding the demand for peace and nuclear war education. The looming threat of nuclear devastation forces this issue to the educational forefront. It is here these related issues can be addressed by the most qualified individuals in the various related fields, and where students can be apprised of accurate, realistic, and balanced information for use in confronting such a threat with potential solutions.

Relevancy, when combined with the general goals of education and citizenship education, becomes a compelling reason to expose students in a systematic fashion to peace and nuclear war content and skills. If education is to be honest and diligent in its goal of preparing students for the reality of our global context, peace and nuclear war education must be a part of the school curriculum.

Psychological Issues Related to Peace and Nuclear War

Children are aware of society around them at a very early age. Although they do not understand the complexities of the world, they are aware of world events and news in general, whether it is about rock groups, natural disasters, or opinions about U.S. presidents. Nuclear weapons and war are familiar topics to children. Many research studies show that children are indeed aware of the nuclear threat posed by weapons and that there are significant reactions and feelings as a result.

Because of this, children face a variety of emotional challenges, one of which is their uncertainty about the future. Educators must be sensitive to these concerns and acknowledge the fear of and interest in so newsworthy a topic. A closer look at some research findings sheds light on student fears and behaviors that result from living in the nuclear shadow.

Studies done after the 1961 building of the Berlin wall and the 1962 Cuban missile crisis found that high school students were deeply worried about nuclear war and the possibility of a liveable future. Sybille Escalona (1965) conducted a study of children's knowledge of the bomb. The questions avoided any reference to the bomb or to war and asked students to "think about the world as it may be about ten years from now; what are some of the ways it may be different from what it is today?" More than 70 percent of 350 students mentioned the bomb as affecting their future in a variety of negative ways. Children either felt that they had no future or that their future would be grossly altered. For example, one student envisioned a gruesome existence living underground.

In studies conducted prior to the late 1960s, it was reported that animals, safety, and supernatural phenomena were the major subjects of children's fears. In a study done in 1969, J.W. Croake (1969) found that political and natural phenomena had become the new most common fears. Political fears were the most intense and most frequently mentioned present and future fears. Croake felt that improved mass communication and television were the major reasons for the shift from the 1960s fear categories. Children of the 1980s are even more influenced by television, movies, and other evolving video technologies. The airwaves are filled with information about nuclear weapons and war, and our children are tuned in. Croake's study is of special interest because it shows an historical shift in fears during the time of the Vietnam War and detente.

In an American Psychiatric Association study conducted between 1978 and 1982, many young people expressed their fears about nuclear weapons. Child psychiatrists John Mack and William Beardslee surveyed 1,151 students in grades 5-12 at schools in urban and suburban Los Angeles, Boston, and Baltimore. A majority of students did not believe that they or

their country could survive a nuclear attack. Students felt a sense of powerlessness and of things being out of control. They felt uncertainty about their future in the face of the threat of nuclear annihilation. It seemed that these young people were perhaps growing up without a sense of continuity and stability.

> We may find we are raising a generation of young people without a basis for making long-term commitments, who are given over, of necessity, to doctrines of impulsiveness and immediacy in their personal relationships or choice of behaviors and activity. At the very least these young people need an opportunity to learn about and participate in decisions on matters which affect their lives so critically (Beardslee and Mack 1982, 76).

In summarizing his data, Mack (1984a) concluded that many children in different parts of the country are concerned about the threat of nuclear war and are experiencing fear, sadness, powerlessness, and rage. Worry about the threat has increased during the period 1975-1983 as nuclear arms competition has become greater. Children often feel that they have no one with whom they can discuss the nuclear problem. They feel alone with their fears and isolated from the adult generation. These feelings lead to cynicism and hopelessness. Mack is concerned about the possible impact that the nuclear threat has on personality development, yet acknowledges the lack of systematic data in this area. Beardslee's and Mack's research provides a rationale for nuclear war education in order to help assure healthy children for the future. For children, optimism about a livable future depends on their belief and trust that adults are concerned and will listen to them, and that they are working to decrease chances of war.

Jerald Bachman (1983) surveyed high school seniors' attitudes for seven consecutive years from 1976 to 1982 about the military and draft. His study is one of the strongest methodologically because of its time frame and broad survey population. He surveyed 130 schools in 48 states. One of the questions in the survey asked: "Of all the problems facing the nation today, how often do you worry about each of the following?" In their answers, Bachman found a rise in the proportion of students who said they "often" worry about the nuclear threat from 7 percent in 1976 to 31 percent in 1982. In 1976, 23 percent agreed with the statement that "nuclear or biological annihilation will probably be the future of all mankind within my lifetime." By 1982, it had risen to

35 percent. Bachman's study reinforces the idea that children are aware of the nuclear threat and that the future is not something they feel assured will ever exist, let alone be of liveable quality.

Several other studies that have replicated the findings discussed above have been criticized. In Problematic Aspects of Nuclear Education, Barbara Tizard (1984) explained some weaknesses of the research. She feels that "the studies which took place after a crisis event may reflect higher than usual levels of concern." Of course students would be more aware of nuclear threats after a nuclear showdown or confrontation of the superpowers, but it is important to note that awareness alone is a sufficient reason for dealing with the issue in the classroom. Tizard said that "most of these studies can be criticized for their methodological limitations. Data were often collected unsystematically, the findings were often reported in vague and general terms, questions were sometimes loaded, and some of the samples were self-selected and hence unrepresentative." These are valid observations and educators must weigh the methodological problems against the very overt message of the research. Children are affected by the nuclear arms race and this awareness must have some effect on their lives and development. Hopefully, future research will more adequately test and measure the issue.

There is also the need for studies to research other areas of child development and nuclear issues. Research tells us what students fear, but there is little investigation of how these fears influence their behavior. Is there a link between the fear of nuclear war and the increase in alcohol use and sexual promiscuity? Does it tie in with the rise in teenage suicide? There are many questions still to be answered.

A study that characterized the "nuclear worrier" concluded that teenagers who worry about nuclear war are not excessive worriers. Goldenring and Doctor (Tizard 1984, 273), in their study, "Adolescent Fears of War," found that nuclear worriers worried about environmental hazards such as pollution, but they were not different from other adolescents in their degree of anxiety about personal concerns. The traits that did characterize them were a higher degree of self-esteem than the non-nuclear worriers, a higher likelihood to discuss the nuclear threat more often, and a greater measure of optimism. Such a finding seems to be,

if anything, a call to inform and debate nuclear policy with these future decisionmakers so that they can help to create a more positive future.

In contrast to the Goldenring and Doctor study are the opinions of Robert Cole. Cole won the Pulitizer Prize for his work Children in Crisis and will examine the moral life of children in his next book. Cole's research suggests that children who worry about the proliferation of nuclear bombs are "not the children in the ghettos of Boston....I find children worrying about other things. Who has stolen what from whom? Who can possibly get a job? Many people who seem unconcerned with the great social issues of our day, such as the threat of nuclear war, are often called victims of 'psychic numbness.' Those people may simply not have the luxury to be concerned. There are other apocalypses for the children of many blue-collar working people" (Winkler 1984, 5, 7). Cole's opinion poses an interesting question: who should be the audience for nuclear war education? The curriculum for impoverished children must address their needs, but nuclear war is a subject that affects all socioeconomic groups and all nations, and thus binds us all together. Nuclear war reduces all of us to a common denominator--that is, victims--all of whom can benefit from learning more about conflict resolution and the possibilities for peace and avoidance of nuclear war.

Children who feel the threat of nuclear war do not have the capacity to ignore it. Most adults go about their daily lives as though the threat of nuclear war did not exist. Avoidance, resignation, and blocking of feeling are what Robert J. Lifton calls "psychic numbing." He says that "Adults have avoided the topic, they try not to know. If we were to allow ourselves to feel what we know, we might not be able to go on; hence the extraordinary gap we experience between our knowledge and our feelings. The best protection we can give our children to insure healthy minds and spirits is to 'give knowledge and understanding.' When parents shield their young to protect them, it's usually an expression of their own adult 'numbing'" (Lifton 1983, 18). Educators who deny the threat, avoid the topic, or do not allow a forum for debate actually do a disservice to children. To hide the truth is a losing battle, literally. Numbing is the way to get through daily life, but it is no way to act as a citizen--it doesn't solve the problem.

The psychological studies discussed above contribute to the rationale for teaching about nuclear war and peace. Educators must prepare students for the roles that they will have as decisionmakers in the future, and should also address the existing fears and curiosity of children surrounding the issues of peace and nuclear war. What price will we pay if we do not? Will we see more negative and destructive behaviors in children who do not believe that they have a future? Will we create a society incapable of action because it is immobilized by fear and denial of the potential for nuclear annihilation? Will we continue to use violence and war as the way we solve or avoid problems and perpetuate simplistic methods of conflict resolution? Or, will we show our children that adults can be trusted to assure them a safe world by seeking alternatives, by changing outdated prejudices and modes of behavior, and by talking about the things humankind fears?

Summary--The Four Themes

What then should the rationale for peace and nuclear war education rest upon? It is our belief that the rationale should first rest upon the longstanding traditions of education, namely the development of independent, critically thinking, informed individuals. This is to be combined with Jeffersonian ideals of democracy in which an educated electorate is able to participate in policy decisions that affect the make-up and character of that nation and its global community. Informed and involved citizens need to be familiar with the issues of the day, especially those of the magnitude related to the current nuclear dilemma. Peace and nuclear war thus provide a meaningful educational context for schools. Finally, public education would be remiss if it completely ignored psychological findings that seem to indicate that the nuclear threat and related issues are having a serious impact on young people.

Together, these four themes lead to a rationale for peace and nuclear war education that is strong and flexible. No single transient issue or concern informs and creates this rationale; rather, it is a rationale based on a long history of public education in America. Schools today are asked to do a great deal and, of late, are attempting to define more clearly their role in educating the community. Peace and

nuclear war education can become a focus that strengthens the current school program, provides an area for the development of important skills, knowledge, and attitudes, and assures the community that the primary concern of public education is to prepare young people as citizens and leaders of the future.

Increasing Interest in Nuclear War and Peace Education

One sure way to determine whether change is occurring in education is to examine the number of local mandates that are written in support of a given educational innovation. Witness the proliferation of reports and challenges related to excellence that arose in 1983-1984. School districts and other organizations pushed for commitments to educational excellence, although perhaps this term was not universally understood to have the same meaning by all parties. Such is the situation with peace and nuclear war education. There are increasing pressures for school districts to provide for peace and nuclear war instruction despite the fact that there is only now beginning to emerge some definition of what such education should entail. Before examining the conceptual underpinnings of peace and nuclear war education, it is worth looking at the various school districts, organizations, and individuals that are pushing for the inclusion of this challenging content and skill area.

Various professional organizations have endorsed the need for peace and nuclear war education. These organizations represent physicians, lawyers, psychiatrists, psychologists, educators, parents, and others who see the threat of nuclear weapons as having negative effects on both young people and society at large. These groups look to education as one tool for confronting the nuclear dilemma. Such groups encourage their members and the educational community to start what Robert Lifton calls "imagining the real"; to begin to confront the reality of nuclear weapons and the effect that they could have on our biological and societal futures. In June 1984, the National Parent Teacher Association resolved to lend its full and active support to the identification of school nuclear education programs which enable young people to learn about nuclear issues, to deal with their concerns, and to respond to the realities of nuclear developments with accurate information, critical thinking, and full ethical considerations (Alexander 1984, 87). Camp

Fire, Inc., has resolved to "support peace education...[and to] encourage councils to promote the development of study groups on peacemaking" (Alexander 1984, 87).

School districts across the country have confronted the issue of peace and nuclear war education and, in many cases, have resolved to mandate the inclusion of peace related content into the regular curriculum. This has not been done, however, without some measure of controversy and debate. For example, the Milwaukee School Board mandated that "curricula related to peace studies and the dilemma of the nuclear arms race" (Alexander 1984, 88) be introduced into the school program. A task force of teachers, other school personnel, and community members was formed to study and implement the resolution, and it was unable to come to unanimous agreement on the nature and role of peace studies in the curriculum. Similar disagreements have surfaced in other school districts and with other peace and nuclear war issues, most notably in curriculum selection. Doubtless the activity around this issue illustrates the interest that it commands in both the lay and educational sectors of society.

Other school districts that have mandated peace related education include Cambridge, Massachusetts; Berkeley, California; Dade County, Florida; and New York City. Des Moines, Iowa, schools have created a peace library that is staffed by a knowledgeable expert, and communities such as Boulder, Colorado, have responded to Federal Emergency Management Agency requests to prepare Crisis Relocation Plans with community education about the effects of nuclear weapons and policies related to their use. "Nuclear war is the hot curriculum issue," said Tony Wagner of Educators for Social Responsibility in 1983. It seems no less true today.

Surveys of educators have found that peace and nuclear war issues have a prominent place in the minds of today's teachers and curriculum supervisors. In a survey of its members conducted for the Association of Supervision and Curriculum Development (ASCD) (Molnar 1983b, 51ff), it was shown that 94 percent of the respondents saw nuclear disarmament as a very significant issue for humankind. Additionally, 82 percent believed that nuclear disarmament should be included to a "great extent" in social studies curricula, while only 15 percent believe that it was

currently being included to a "great extent" in such curricula. Other responses indicated that these educators believe a discrepancy exists between what should be in the curriculum and what is actually in it. When asked, "What is the most important social issue regularly studied as part of the school curricula?" only 6.4 percent mentioned nuclear disarmament. When asked, "What is the most important social issue facing humankind?" 34.8 percent responded that it was nuclear disarmament. This gap is significant.

Molnar also administered his survey to social studies educators through the National Council for the Social Studies (NCSS) (Molnar 1983a, 305). Similar concerns related to nuclear disarmament were expressed by these results. In fact, Molnar found that both groups (ASCD and NCSS) tended to indicate that the most important issues facing humankind were not the same as the most important social issues studied in school, and both groups thought that educators as a group should attempt to formulate positions on social issues. These findings would seem to cast doubt on the ability of our schools to completely prepare young adults for the world that awaits them following graduation, and indicate that a strong interest exists in teaching about peace and the threat of nuclear war.

State social studies supervisors appear to agree that nuclear war related issues need to be addressed in the schools. Hahn (1985) found that supervisors believed teachers should confront nuclear issues and help students examine possible consequences and alternatives, and that teaching about nuclear issues is a constructive response to student concerns about the topic. The flurry of surveys on this issue indicate, once again, the interest that it has generated in the educational community.

Finally, the amount of curriculum materials that are being developed and the number of conferences being held on the topics of peace and nuclear war education indicate teacher interest in this field of study. A list of films related to peace and nuclear war runs to 50 pages (Dowling and Sayer 1984). Nucleography: An Annotated Resource for Parents and Educators on Nuclear Energy, War, and Peace (Barber and others 1982) has over 100 pages of entries including books, films, supplemental materials, and other teaching aids. Publishers are beginning to produce

materials to meet the needs of those teaching in this area, and a number of resources representing all sides of the political spectrum are now available.

Conferences on peace and nuclear war issues have been sponsored by the National Council for the Social Studies, the Social Studies Development Center, The Stanley Foundation, The Arms Control Association, The International Student Pugwash, Educators for Social Responsibility, and others. Additionally, sessions on peace and nuclear war issues have been well attended at both regional and national social studies conferences.

In summary, there appears to be a surge of interest in peace and nuclear war related education in our society. This interest spans from kindergarten to college and includes both school and community groups. This interest reflects the concerns of a society living in the context of a nuclear age, and the concerns of groups such as educators who are worried that society may not be fully preparing its young people to function competently in tomorrow's world.

Why Have Teachers Avoided Peace and Nuclear War Education?

Although peace and nuclear war related education is a fairly new area of educational interest, it is not only its newness that has caused teachers to avoid teaching it. Robert Lifton (1983, 18), upon commencing his study of the effects of the atomic bomb blast at Hiroshima, found little research on the subject. He thus developed a "rule of thumb....The more important a subject is, the less likely it is to be studied in our academies or elsewhere." Could this be the underlying reason that public education has shied away from a rigorous exploration of peace and nuclear war topics?

In reality, teachers have avoided peace and nuclear war education for a myriad of reasons. Among these reasons are fears of confronting the unknown, trepidation related to having to face and clarify one's own thoughts about nuclear war, the apparent difficulty of presenting the content in a balanced fashion, a lack of good curricula and methods, and fear of public backlash from teaching a topic that may not be considered the school's business. Combined, these create a potent barrier against including the issues of peace and nuclear war in the standard public school curriculum.

The situation, according to Harvard psychiatrist John Mack, is not unlike "the furor around sex education two decades ago....The debate is fueled by the topic itself and its disturbing nature" (Mack 1984b). In both cases, teachers must address a content area that forces introspection on issues of great import. Frequently, long-held or long-ignored prejudices and feelings rise to the surface. To not deal with the subject is often the easiest of options. Pressure from community advocacy groups, both pro and con, add to the potential unpleasantness associated with the teaching of new and controversial subjects. Many teachers believe that they can no longer teach in an unimpeded and secure atmosphere. A recent report to the membership of the National Council for the Social Studies on peace studies found that "what is difficult [for teachers] is finding the courage and energy to go ahead with [peace studies], often in the teeth of stubborn administrators or suspicious parents, often with one's own misgivings about the wisdom of dragging children through such traumatic material" (Ferber 1983). Is it any wonder that so many teachers steered clear of sex education in the past and that their colleagues now look with skepticism on advocates of peace and nuclear war education?

It is not only the bureaucratic and community pressure that confounds potential teachers of peace and nuclear war, but, as Hoguet (1984, 4) states, "National security is a protean notion, issues such as the MX missile, the vicissitudes of the U.S.-Soviet relationship, or the annual defense budget are typically discussed with frequent references to national security, and either its endangerment or its enhancement. Teachers and students find themselves tugged first in one direction, then another, as equally plausible sounding but conflicting arguments are advanced by their various advocates." In the face of such complexity, it is easier to stick with the textbook and cover the traditional content that it sets forth. The life of the average teacher is already too stressful to add one more burden unless there is some compelling reason to do so.

The complexity of peace and nuclear war related education has many dimensions. If the goal of peace education is to teach new ways of thinking in the nuclear age, who is to teach teachers the new ways of thinking? If the goal of peace education is to challenge traditional

assumptions of competition, the role of weapons, and our notions of enemies, how first is the average teacher to be brought into a meaningful dialogue with these issues? In fact, as a society, we have a difficult time merely understanding the concept of peace. We assume it is the absence of war, but aren't sure if that is all of it. Students find peace to be far more boring, dull, and passive than war--a subject that is typically portrayed and viewed as exciting and heroic.

If a goal of nuclear war related education is to develop a citizenry more knowledgeable of national security and nuclear issues, there are a number of obstacles that must be overcome. The information is complex, filled with contradictory statistics, frightening, emotionally draining, political, and controversial. Arms control and defense experts can hardly agree on numbers and effectiveness of weapons and treaties. How, thus, can a classroom teacher become confidently conversant in such apparent ambiguity? Teachers could understandably be resigned to "playing it safe" and "avoiding the whole mess."

Another factor that contributes to the apparent unwillingness of many teachers to include peace and nuclear war in their curricula is that there are increasing demands placed on already overburdened teachers. In the wake of the many excellence reports and critiques of schooling, there is a push for a return to some notion of the basics. This is usually meant to refer to math, science, written communication, and the fundamentals of American history. Teachers are pressed to cover the curriculum despite declining dollars and rising class sizes. The infusion of a seemingly new content area is thus the last thing that most teachers want.

Teachers are primarily dependent on textbooks for their curriculum and few, if any, major social studies texts devote more than passing mention to the issue of nuclear war, and none to peace related issues (Fleming 1983, 550). If a topic is not in the textbook, many teachers will not teach about it, and many publishers will not include peace and nuclear war in any meaningful way because of perceived pressures from textbook critics in crucial textbook markets. This hurdle must be overcome for any significant movement towards peace and nuclear war education to be made.

In the real world of teaching, time to create new lessons is a luxury, opportunities to learn about new topics are nearly nonexistent, and budgets for new and innovative materials are declining. Such realities, when combined with the above factors, make the paucity of those teaching about peace and nuclear war not surprising. It is the challenge of those who advocate peace and nuclear war education to work within this environment to bring colleagues to an understanding that the benefits of teaching about peace and nuclear war can more than balance the costs of doing so.

Chapter 2

WHAT IS PEACE AND NUCLEAR WAR EDUCATION?

Overview

The choice of the term "peace and nuclear war education" to describe the focus of this book is deliberate. There are a variety of terms to cover the general content that will be addressed by the authors including national security education, arms control education, global education, nuclear age education, nuclear education, peace studies, and peace and world order studies. However, each of these terms creates limitations for adequately describing and explaining the book's complex topic, and peace and nuclear war education has thus been selected as the most appropriate and inclusive term to describe the special content and teaching skills necessary for the nuclear age.

"Peace and nuclear war education" is just that. By describing related curricula in such a direct manner, the possibility of accusations arising that a hidden curriculum is being presented are minimized. In today's education-conscious society, such openness is to be encouraged. Peace and nuclear war education covers a continuum of content moving from an understanding of past decisions to an awareness of present controversy toward visions and skills appropriate for the future.

Peace and nuclear war education provides an umbrella that is large enough for many teachers to fit under, while being specific enough to define a realistic content area. Many teachers are most comfortable teaching the set content of nuclear war related topics. Other teachers feel that focusing only on nuclear war and nuclear weapons is too limiting, and that students must learn new ways of thinking and confront the multifaceted realm of peace studies. Both approaches should be encouraged. Peace and nuclear war education is, thus, an inclusive rather than exclusive term.

What is Nuclear War Education?

Nuclear war education is focused on nuclear weapons and the new reality that they created at the conclusion of World War II. Nuclear war education takes as its content many of the following issues and topics: the development and use of the atomic bomb, political history

since 1945, international security, roots of violence and war, evolution of military technology and weaponry, U.S.-Soviet relations, strategy in a nuclear age, policy formation by national and international decision-makers, civilian/military relations, arms competition/arms control, international cooperation, the short- and long-term consequences of nuclear weapons blasts, and U.S.-European relations ("Nuclear Arms Education in Secondary Schools" 1985, 6). These are topics that fall under the general category of national security education. The content is specific to nuclear weapons in that the weapons themselves provide the basis for learning and discussion.

There is also a clear skills component to nuclear war education. Higher level thinking skills are promoted rather than an emphasis on memorization and recall. The reason is obvious and valid--mere recall of content is meaningless in national security debates unless that recall is used to help clarify and understand a premise being presented. Students in nuclear war related courses are encouraged to use critical thinking skills such as active inquiry, synthesis, evaluation, comparison, analysis, listening, and the willing suspension of judgment while hearing an opposing viewpoint. These skills are to be valued in a democratic society and are those that will facilitate the development of careful thinkers when national security topics are discussed.

It should be emphasized that the content of nuclear war education must always be age-appropriate. For example, elementary school children are not at an age where it is appropriate to delve into the details of nuclear weapons blasts and their effects. At this age, it is valuable to discuss the nature of war and the realistic concerns and fears that war generates. A discussion of strategic deterrence will have a different quality and will reflect different teacher expectations at the junior high or middle school level than at the senior high level.

The overall goals of nuclear war education are to develop understanding of national security terms, issues, and dilemmas as they relate to nuclear weapons, while enhancing skill development in the areas of critical thinking and citizenship participation. If such goals are met within a balanced and credible program, the students will be better prepared to enter the adult world and participate in democratic institutions.

What is Peace Education?

Peace education is harder to define and has thus been more vulnerable to criticism than has nuclear war education. Peace education is seen as having a built-in bias, and public schools tend to shy away from controversial curricula. The World Policy Institute noted that "to hear that someone is studying war does not seem to surprise people as much as when they hear about someone who is studying peace. The classroom, it is argued, is no place for abstract values" (Wien 1984, 4). One reason for this sentiment is the lack of understanding in the general public about what peace education seeks to accomplish and what questions it seeks to help students answer.

The specific content for peace education starts with the process of defining the term "peace." This definition must evolve, and it must be considered at a variety of levels from intrapersonal to international. The definition correlates to concepts of economic and social justice, however defined, and human rights, ecological awareness, and notions of a just world order. The process of definition allows students to consider viewpoints that may be new and contrary to some previously unquestioned assumptions.

Content for peace education also includes:

--Violence and aggression and their roles in society whether actual or potential.

--The nature of conflict and forms of conflict resolution, management, negotiation, and mediation.

--Obstacles to peace including fear, prejudice, ideology, perception, language, propaganda, historical perspectives, and limited imagination.

--The history of social change, such as the movements for abolition, women's suffrage, pacifism, and civil rights.

--Peacemakers and how they have accomplished their goals.

--Competition and cooperation in our culture and the cultures of others.

--Dealing with differences in positive ways.

--Enemies and how they are created, perpetuated, and used.

--The history of warfare, including warfare in the nuclear age.

--The role that the United States has played as a global peacemaker, and the potential costs related to the quest for peace, such as the possibility that those who seek peace may be subjected to outside domination.

--International relations and global interdependence.

This list is in no way intended to be exhaustive, or to inflexibly delimit or define the content of peace education. Rather, it identifies areas of concern to peace educators and content that students in peace education courses or units might study.

The skills related to peace education are as important as the content. Truly, this area of study is highly skill-oriented because, like nuclear war education, the mere acquisition of content is not enough. There must be something for the student to do with the newly discovered knowledge and insights. The traditional skills that are stressed in peace education are critical thinking, synthesis and evaluation, problem solving, effective communication, and conflict resolution. These skills help students to manipulate content and experiences and develop new insights as they confront new information.

More innovative skills involve manipulation of information and the development of new insights, too. However, they do so in ways that are not always stressed in traditional school programs. One of these skills is the ability to "enlarge the center" (Wagner 1985) by breaking down polarities and dichotomized thinking. It is easy for students to see the opposite ends of a spectrum, to think in terms of black and white. It is far more difficult for them to examine the gray areas where solutions to problems so often exist. The skill of believing becomes important as students are asked to suspend judgment on opinions that may be different from their own in order to truly hear what is being said. From this comes the possibility of seeing a problem in a new light, and perhaps a solution that once eluded their grasp. The goal here is not to create intellectual ambiguity, but rather to widen the acceptance of diversity in the pursuit of peaceful alternatives to issues. Some of these skills are now being taught in our schools, others are new and will take time for both teachers and students to master.

The reality of present day issues and future concerns is that they are complex. The skill of imaginative thinking must be developed in

young people if they are to confront these issues and concerns with a higher likelihood of successful resolution than individuals and nations are currently experiencing. Educators must question whether we are stuck in our ways of thinking about the world, and whether such is a result of imaginations that are not continually pushed, prodded, and stimulated. We must encourage students to stretch for new solutions to problems and for new ways of defining questions as prerequisites for future civic efficacy. A lesson should be drawn from science where breakthroughs are made by the dreamers and tinkerers who refuse to accept the prevailing wisdom of the day, and who shut out the protests of "it's not done that way!"

Learning in the vacuum of the school must be challenged by peace and nuclear war educators. New skills and knowledge must have a place for practice and exhibition. Civic involvement has for too long been absent in public education. Once the school was a vital facet of the larger community. Recently, schools have been isolated entities that shape their products and send them out to the real world. It is time, according to many observers of public education, to have students spend time in the community. Practice and experience in serving the community helps students see the larger whole within which they exist, and helps them more honestly see that the well-being of the community is directly related to their own well-being. As educators we must move beyond the walls of the school as we develop competent citizens and future decisionmakers.

These skills and the content that supports them make up the broad outlines of an effective peace education program. The skills and content have natural fits in grades K-12 because of the close relation they have to the world within which students exist and grow. Peace education contains the content and skills for meaningful education within a broad realm of course offerings and units of study.

Peace education also springs from a need to widen the scope of inquiry on issues of war and the human condition. What must be confronted in peace education is a problem related to perceptions. For example, it was found that

> while students had a concrete concept of war, their concept of peace was often abstract, or simply the absence of war. They often saw peace as passive, weak and boring....Students

> expressed a strong sense of powerlessness and lack of inspiring models of individuals and organizations that had made a difference...(and) adolescents...were...expressing a cynicism about the possibilities for a better future (Perspectives... 1983, 1-2).

A curriculum and educational program is needed to address these realities with our youth. If war is the only option that students know, they will not have the skills or ability to choose an alternate path other than war. As an example, traditional U.S. history courses teach from war to war; war thus becomes a logical and natural outcome of disputes that could not be resolved by other means. The shortcoming in nuclear war education is that "teaching about preventing nuclear war is not enough to build the bridge to creating peace" (Perspectives... 1983, 1-2).

The content of peace education is both broader and deeper than nuclear war education. In essence, peace education is part of a larger set within which one would find nuclear war education; but peace education would be vital to the curriculum whether nuclear weapons existed or not. The existence of such weapons makes the urgency of peace education all the more real. War, a common form of conflict resolution, has in many senses become anachronistic, whether admitted or not. Thus, methods of realistic peaceful conflict resolution need to be examined.

The context for peace education is global education, the understanding that we live in an interdependent world. The global community is not a modern day phenomenon. Mercantilism and imperialism made sense only when one looked beyond the nation state to a global view of interdependence. Since that time we have been moving more and more towards an "inclusive reality" among nation states wherein nations are dependent for their well-being on the fortunes of other nations. Multinational corporations certainly understand this, as do military planners (Hartoonian 1984, 5-6). At the same time, peace educators must help students understand the more narrow conception of "self interest properly understood" (Hartoonian 1984, 5-6), whereby individual concerns have validity within the larger whole only as long as the whole is allowed to exist. This is, in essence, caring for the community in which we live, which today includes all nations and cultures in the world. Our global economic and military systems have made the fate of the earth our own

individual fate. The individual and nation state have validity only within this framework, and students should learn this reality. Peace education seeks to teach this.

Commonalities Between Peace and Nuclear War Education

There are a number of approaches and processes that are common to the teaching of peace and nuclear war education. These approaches are often what sets this content area apart from more traditional content areas. However, the related skills and teaching procedures can certainly enrich not only the teaching of peace and nuclear war, but also any curricula now being taught within the public schools. These approaches serve to involve students in their own learning and academic growth.

Dialogue and active listening are key components of teaching about peace and nuclear war related content. Students must be continually challenged to truly hear what another speaker is saying and to honestly listen to divergent viewpoints. Through dialogue, meaning and learning can be achieved as the student mingles existing assumptions with reasoned input from others. Related to this component is the necessity for students to be involved in non-polarizing debates. In such a forum, the goals are to hear and articulate the positions of others, rather than to listen with a singular obsession of countering the notions another might hold or be describing. In Weapons and Hope, Freeman Dyson comments on this by noting that "the debate on the role of nuclear weapons is already in progress and will no doubt continue....But it will be of little benefit to the world if it remains politically polarized, with each side preaching only to its own true believers" (Dyson 1984, 9). Students, if they are to honestly and constructively confront the dilemmas raised by both peace and nuclear war education, must begin to see areas of agreement and commonality from which solutions to national security dilemmas may arise.

Both peace and nuclear war education also seek to complicate the thinking of students. These are extremely tough and frustrating issues, and to consider them as anything less does little justice to either the material or to young people. Students need to be encouraged to face ambiguity and to seek sense within apparent nonsense, as well as to seek nonsense within what appears to be sensible. Cut-and-dried answers are

a comfort to all people because they remove from us the difficult problem of sorting through conflicting goals and assumptions. Unfortunately, simple answers are rarely available for complicated issues.

Part of the process of extending students' thinking is the use of inquiry learning techniques in which a class examines materials for assumptions, biases, and meanings. Within this context, there must be a balance or multiplicity of viewpoints on the issue at hand. To present only one side of a multifaceted question is professionally and pedagogically unsound. Materials that do have a clear bias should be used to help students discover the tools of propaganda and the use of language in pressing a particular viewpoint forward. The effective and responsible use of biased materials can be extremely helpful in teaching students the skills of interpretation and analysis.

The attainment of knowledge and skills is important to the pursuit of educational goals but such is not the only objective of our mission. The achievement of goals related to affective development are also vital to the process of education, and are especially important in the study of peace and nuclear war issues. Students must be allowed and encouraged to share their emotional responses to this emotionally powerful area of study. Teachers need to provide time and permission to acknowledge, legitimize, and validate the fears that may surface as students confront the realities of the nuclear age. This development of affective interactions among students is best achieved through a tone of openness by the teacher and a less authoritarian demeanor in the classroom. In no way is this meant to diminish structure or discipline; rather, teachers must be allowed to show their own concerns, and to present themselves as one more human being confronting the largest of issues facing our species. Within such a context, student growth is accomplished, and all are respected for their willingness to share not only what they know, but also what they feel.

Finally, peace and nuclear war education emphasizes the concept of choice and involvement. Such learning should not remain solely in the classroom or within the confines of the school. As students learn about the world that they will enter, they must be given opportunities to practice and develop positive democratic attitudes. Such opportunities can help to dispel the apprehension noted above and to diminish the cyn-

icism that seems to be so pervasive among young people today. Says Dyson, "The first and most difficult step is to convince people...that our lives have a meaning and a purpose, that we can still choose to be masters of our fate" (1984, 297). In so doing, the information students gain can be used to affirm life and the necessity of working toward a resolution to the nuclear dilemma.

Together the processes and goals discussed in this chapter serve to give meaning and context to the study of peace and nuclear war. Few of these approaches are novel or radical, and all have their places in schools, whether peace and nuclear war as specific topics are taught. Perhaps the greatest contribution of this area of study can be the sense of respect for the future that it brings to the educational endeavors teachers pursue and to the students with whom they interact.

Summary

Although it is apparently loaded with controversy and bias, peace and nuclear war education is actually not all that much apart from the existing goals of education. Peace and nuclear war education seeks to involve students and use acknowledged, effective tools of instruction. Information is presented that is vital for an understanding of the recent past and its relation to the present and future. Peace and nuclear war education strives to push students to confront and learn from complex and often contradictory information.

In addition, peace and nuclear war education can be infused into existing courses and units as deemed appropriate. The skills and content are focused on the world of the students and the future they stand to inherit. It is a relevant topic for study in the best sense of that term--timely and appropriate, and not part of a passing fancy. Peace and nuclear war education "requires a deep and abiding devotion to life, a compelling respect for the fundamental human rights of all people, a meaningful appreciation of the differences among people, a sense of charity toward people in need, an understanding of interdependence, and the tolerance to forebear while mediation...and legislation work out progress toward justice and equity" (Herndon 1983, 532). In other words, "the primary task of education for peace is...to reveal and tap the reality of those energies and impulses that make possible the full

human capacity for a meaningful and life-enhancing existence" (Sloan 1983, 1). Such are goals that ennoble the process and tasks of education.

Chapter 3

PEACE AND NUCLEAR WAR AS CONTROVERSIAL ISSUES

Overview

One of the most difficult aspects of teaching about peace and nuclear war is the controversial nature of the topics. Although nearly all citizens agree that nuclear war is to be avoided and that peace is an admirable goal, there is no such agreement on the question of how, or even whether, peace and nuclear war ought to be addressed in the classrooms of America. It is far easier to present a unit on World War I or on algebra than it is to introduce peace and nuclear war into the curriculum. Conflicting assumptions and value related questions enter the study of peace and nuclear war, and therein lie seeds of controversy. This chapter seeks to examine the controversial nature of peace and nuclear war education, the climate in which these topics are to be taught, the need to help students face controversial issues, and the criteria to be used to help students accomplish this.

The concerns of teachers and coordinators regarding the teaching of peace and nuclear war related issues are many. They include: "How do I reconcile my own political beliefs with the need to present balanced information?" "Where can I find non-biased materials for teaching about peace and nuclear war?" "What if angry parents or community members challenge my teaching these subjects?" "What standards exist to defend my choice of topics and methods of presentation?" As has been noted (see Chapter 1), teachers are reluctant to teach about peace and nuclear war for just these reasons. The caution shown by a large segment of the teaching profession in regard to controversial issues must be addressed if peace and nuclear war education are to become common elements of the public school instructional program.

An interesting interaction has recently occurred that has had a profound impact on the teaching of many controversial, as well as peace and nuclear war related, issues. At the same time that an increased interest has been shown in the teaching of peace and nuclear war, there has been a parallel increase in pressures to restrict student exposure to controversial and sensitive subjects in the classroom. Perhaps the clearest example of this latter phenomenon is the passage of the Hatch

Amendment and the current pressure to enforce its provisions (Stone 1985, 1). Although interpretation of this amendment is still open to discussion, one incident related to it demonstrates the impact that such legislation could have on the teaching of peace and nuclear war and illustrates the climate within which the teaching of controversial issues now exists. A letter distributed by the Eagle Forum, a nationwide conservative organization led by Phyllis Schlafly, cites the Hatch Amendment and states explicitly that parental permission and prior review of curricula should be required for "instruction in nuclear war" (Stone 1985, 4). This form letter is addressed to the local school board president and is to be signed and sent to school by the parent. Critics charge that open and free dialogue, and many of the most effective methods for teaching about peace and nuclear war such as student journals and role-playing, would be prohibited as classroom tools under provisions of this amendment. Such is neither the intent nor actual wording of the amendment.

This being noted, it is also important to reaffirm the notion that education exists within and for a local community's needs and desires. Policies and procedures must exist that enable parents to voice opinions, share concerns, and challenge educational decisions that could have impact on their children. Such policies, however, need not have the chilling effect that the Hatch Amendment seems to potentially present. Just as schools must respect the rights of parents and community members to have input into educational policy decisions in an appropriate context, so also must the community recognize that teachers and others in the school program are professionals striving to prepare young people for a world filled with difficult questions and a wide diversity of opinion.

At the root of the controversial nature of peace and nuclear war education are the different assumptions that individuals have regarding these highly charged subjects. On one side of the debate are those who see peace and nuclear war education as being of the utmost importance in helping to confront the many issues of the nuclear age. The following premises are common in the defense of peace and nuclear war education:

1. Given immense stockpiles of weapons in the United States, the Soviet Union, and elsewhere, sooner or later some of them will go off.

2. Once launched, a nuclear war between the great powers would destroy civilization, wipe out much of the human race, and make large regions of the earth uninhabitable.
3. The first moral and practical priority in the world today for all people is the prevention of nuclear war.
4. The knowledge and means of destroying the world will not go away in the next year, generation, or ever in the future. The future belongs to the young, and their fate is now in our hands.
5. The schools' first priority is to educate today's youth to understand these dangers and to cope with them as adults (adapted from "The Leading Edge" 1984, 1).

As part of this line of reasoning, it is believed that peace and nuclear war studies cannot be totally value-neutral because of the value-laden nature of the issues it addresses. Questions of social and political policy are loaded with values, and to ignore them would render the study both unrealistic and meaningless. A goal of peace and nuclear war education is thus to present a variety of viewpoints and to help young people challenge standing assumptions regarding nuclear weapons policy and consider the many efforts of accomplishing a more peaceful world. The World Policy Institute contends that "Peace...studies do not threaten the objectivity of the classroom. These studies enhance it. This education is not intended to close minds, but to open them. Diverse, pluralistic opinions must be presented to students so that they can absorb, weigh, and analyze these views for themselves" (Wien 1984, 4).

On the other side of this argument are those who take issue with many of the assumptions and premises listed above and who see peace and nuclear war education as being, at best, misguided and, at worst, dangerous for young people. The assumptions that this group challenges include the following:

1. The arms race is the greatest threat facing humankind.
2. Parity of nuclear strength exists between the superpowers, and the concept of nuclear superiority is meaningless.
3. Nuclear war would create unprecedented damage, there is no defense against nuclear attack, and nuclear war is unwinnable.

4. Courses on peace and nuclear war help young people to better confront fears and concerns related to nuclear war (Kwapisz 1984b).

This group sees little need for education about peace and nuclear war. Instead, they believe that more honest education on the realities of Soviet expansionism and steps necessary for the preservation of the American way of life should be provided for young people. From this perspective, peace and nuclear war education is seen as frequently biased and overly political in nature. This group feels that nuclear arms education is complex and value-laden, that issues become too simplified, and that curricula tend to reflect the more liberal political leanings of the authors. This hidden agenda is most often anti-military, anti-defense, pacifist, and pro-Soviet. Peace and nuclear war education is also seen as being too emotional and overwhelming. It tends to increase student fears, guilt, and feelings of hopelessness. According to psychologist Harold Voth, these courses often lead to "a sense of defeat and depression" in young people (Voth n.d., 5). Finally, this group believes that peace and nuclear war courses tend to propagandize that anything military is evil, and that the United States is mostly to blame for the weapons and actions of the nuclear age (Alexander 1984, 14). These courses are seen to "scare the wits out of young people, challenge them with unsolvable problems, (and) provoke a reaction of despair and hopelessness" (Kwapisz 1984a).

The avoidance of just this sort of polarization is a primary goal of peace and nuclear war education. Within each of these two positions are elements that must be considered by those who plan to teach these important subjects. Neither the well-intentioned exuberance of the first group nor the pessimistic restraint of the latter group should completely guide the study of peace and nuclear war related issues. Great care must be exercised in the formation of goals and objectives for peace and nuclear war education so that young people are informed rather than indoctrinated, left with feelings of strength rather than feelings of despair, and encouraged to develop their own positions rather than having to accept those of a particular teacher or curriculum designer.

A Rationale for Teaching Controversial Issues

There is little question that it is important for young people to learn how to confront and think about controversial issues and topics. Ideally education should be far more than a routine movement through textbooks with the hope of completing them by the end of the school year. Rather, education should challenge young people, promote growth of intellect and sophistication of attitude, and deal with the real problems of real human beings in the real world. The study of controversial issues such as peace and nuclear war helps to achieve these important goals.

In light of these goals, what exactly is a controversial issue? S. Samuel Shermis lists the following as characteristics of a controversial idea:

> It is one that is at issue. People disagree.
>
> The disagreement is likely to be accompanied by extremes of emotion.
>
> For purposes of simplification, the idea is likely to be polarized. Polarization invariably distorts the idea but does allow people to deal with it in a simpler yes-no, for-against, right-wrong manner.
>
> Distortion and misinformation abound.
>
> Individuals tend to be irrational, contradictory, and illogical.
>
> There is considerable ignorance and lack of dependable information (1983, 33-34).

Given these characteristics, the issues of peace and nuclear war certainly qualify as controversial in nature. In fact, a primary goal of peace and nuclear war education is to move beyond these characteristics, to make these topics less polarized, to help individuals become more informed and less irrational, and to encourage realistic problem solving of the nuclear dilemma.

The teaching of controversial topics is a vital part of any educational program according to The Essentials Statement (1980). This document notes that the goal of educators should be to "resist pressures to concentrate solely upon easy-to-teach, easy-to-test bits of knowledge, and must go beyond short-term objectives of training for jobs or producing citizens who can perform routine tasks but cannot apply their knowledge or skills, cannot reason about their society, and cannot make

informed judgements." Teaching about controversial issues is one way to create the context for the development of such skills and to force students to consider alternatives and values that promote the formation of informed judgements.

Controversial issues need to be included in the school program for a variety of other reasons. Discussion and exploration of these topics are motivators for student involvement and encourage application of "classroom learning" in solving real world problems. Such processes help students to learn more about themselves and their views of the world around them. Controversial topics also force students, in the relative comfort and safety of the classroom, to make and test hypotheses, and to practice the skills of evaluation, synthesis and application. Such higher order thinking skills need to receive increased attention as schools strive to enhance the skills that students take with them into the outside world.

The notion that students need to have practice in confronting tough issues is highlighted in the statement on Academic Freedom and the Social Studies Teacher (1969) prepared by the National Council for the Social Studies. It states that "Students need to study issues upon which there is disagreement and to practice analyzing problems, gathering and organizing facts, discriminating between facts and opinions, discussing differing viewpoints, and drawing tentative conclusions." The study of controversial issues will help to develop such skills and attitudes as "The willingness to recognize that differing viewpoints are valuable and normal; the recognition that reasonable compromise is often an important part of the democratic decision-making process (and teach) the skill of analyzing and evaluating sources of information--recognizing propaganda, half truths, and bias.

An appropriate approach to the study of controversial issues in the public school program from grades K-12 will help create critically thinking young people who will not be afraid to confront an issue simply because it has conflicting perspectives. Such students will perhaps be less pliant, but will certainly be more able to react to the conflicting and confusing information that bombards citizens on a daily basis.

Criteria for Teaching Controversial Issues

More than nearly any other area of study, the teaching of controversial issues in the classroom demands adherence to specific teaching criteria. This is so whether the issue to be addressed is genetic engineering, mining the international seabed, or peace and nuclear weapons. A controversial issue must first meet these four criteria before it should be permitted into the school program. The issue must be: (1) presented in a way that is relevant to students and to the subject or course being taught; (2) appropriate to the age and maturity level of the students involved; (3) regarded by the teaching profession as important; (4) not disruptive to school or classroom discipline ("Nuclear Arms Education in Secondary Schools" 1985, 5). If these statements apply to the particular controversial issue, it can be argued that it is appropriate for inclusion in the school program. Peace and nuclear war education, as noted throughout this work, meets these criteria.

Beyond the basic criteria discussed above, there are several other standards that peace and nuclear war related courses and units must, like any controversial issue, meet. These standards relate to the means used to teach about the particular subject. In the realm of peace and nuclear war education, the program should inform rather than indoctrinate students, strive for balance through the presentation of multiple perspectives on the issues at hand, and utilize dialogue as a primary means of working with information and ideas. Each of these approaches works together to create a curriculum that is open, honest, fair-minded, and that promotes intellectual growth on the part of the students involved.

Teachers must first make a distinction between information and indoctrination in the teaching of peace and nuclear war related issues. "Indoctrination," says Shermis (1983, 35), "has as its goal the uncritical acceptance of (indeed, loyalty to) a point of view, an attitude, a value, or a position." Schools should teach students how to think, not what to think, that to study an idea is not to endorse an idea, and that classrooms should be forums for inquiry rather than arenas for the promulgation of particular viewpoints. To ignore these basic ideas is to subvert the goals of critical thinking and citizen participation that are so crucial to the study of peace and nuclear war.

The avoidance of indoctrination is a difficult task that takes constant vigilance on the part of teacher and students. Questions must be framed in such a fashion that the answer and viewpoint are not inherent in the question itself. To ask only questions about the weaknesses of "peace through strength," or the immorality of war prevents students from examining the potential merits of the positions being discussed. The selection of readings and audiovisual aids must not be allowed to slant the study of peace and nuclear war topics. When showing films and critiquing them as a class, it is important to engage in open inquiry so that students come to their own conclusions instead of being forced to accept those of the producers or teacher. Teachers of any controversial issue should be mindful of the "Code of Ethics" (1981, 8) of The National Council for the Social Studies which states that "Those engaged in social studies instruction have a responsibility to accept and practice the democratic commitment to open inquiry and to approach controversial issues in the spirit of inquiry rather than advocacy."

The second standard for teaching about peace and nuclear war is that a credible balance in the presentation of the many viewpoints related to these important topics must be achieved. In other words, there should be teaching of "multiple perspectives" on the questions related to peace and nuclear war. This goal of credibly teaching multiple perspectives serves to accomplish a great deal. First, it reflects reality in that there are indeed many viewpoints on the issues of peace and nuclear war. To present only one or two is doing a disservice to students who will be asked to take stands on the various positions later in life. Multiple perspectives also provide more fertile ground for the development of decision making and critical thinking skills. Teachers become facilitators who help students to understand the views of others rather than working with students to shoot holes in the theories that are contrary to their own viewpoints. This process of widening understanding instead of polishing arguments in favor of or against a position helps students see the complexity that is inherent in the study of peace and nuclear war (Snow and Goodman 1984).

In teaching any controversial issue, it should be remembered that what the teacher thinks is correct is of little importance. What is important is that the reality of the debate occurring outside of the

classroom is honestly transferred into the classroom. An excellent example of this process is found in the activity titled "Clarifying Some Positions on Avoiding Nuclear War" by Charles Hermann of the Mershon Center at The Ohio State University ("Nuclear Arms Education in Secondary Schools" 1985, 15-19). This lesson realistically and accurately portrays the diversity of perspectives in the debate on the appropriate steps to be taken to avoid a nuclear war. Students have an opportunity to discuss and clarify ideas from a wide spectrum of opinions. Such discussion enhances later decision making and critical thinking on national security issues.

Balance implies a sense of fairness in the presentation and discussion of controversial issues. Balance is not achieved by providing an equal number of readings or handouts representing all sides of an issue, nor by rigorously counting minutes spent on each viewpoint. In a democracy "the only politically feasible way for educators to deal with controversial issues is to treat all sides with impartiality. Impartiality does not mean neutrality. It does not mean that all sides on an issue must be recognized as equally valid. It means that all sides have an equal right to be heard, to be part of the dialogue" (Blair 1984, 2). Because most materials include some form of bias, teachers must learn to use bias as a teaching tool. An initial question following a reading should always be "what do you think the author is really trying to say or advocate in this piece?" Students must learn to look for bias as they interact with each piece of the curriculum. Only through this process will they come to learn the skills necessary for "cutting through" an argument to find the underlying assumptions and biases, and to ultimately take a stand.

The use of dialogue is the final standard for teaching about controversial issues. By dialogue we mean the process of communication among students and teacher in which all are honestly listening to hear and understand each other's viewpoints and ideas. It is through such dialogue that students and teachers come to truly understand the issues at hand. Through dialogue, students can test hypotheses, react to peers, interact with curricula, challenge notions, hear others, and engage in the many skills necessary for participation in a democratic and open society. True controversial issues--and peace and nuclear war

is no exception--rarely, if ever, have a "right" answer. Thus, the focus of the study is on questions such as "why?" and "what if?" In the study of peace and nuclear war, the students must ask why we should and do have these weapons, how many are enough, how many are not enough, what would peace look like, and how can it best be achieved. These questions lend themselves to open dialogue in the classroom, where no person's views are more correct than anyone else's, and where all must engage in the open and rigorous pursuit of information and understanding. The content of peace and nuclear war education forces the sharing of feelings, the need for empathy, and the search for greater awareness of the goals of others. "Dialogue is a cooperative venture in which persons of differing views learn from each other...It is an enterprise which requires respect for the views of others, though it may begin with disagreement with them. It requires openness to the possibility that they understand or know something which you do not, and patience with them when you understand or know something which they do not" (Blair 1984, 2). In such an environment, the polarization so often feared when teaching controversial issues can be avoided or minimized and students will engage in a model of the productive search for answers upon which democracy rests.

Summary

The controversial nature of peace and nuclear war education cannot be avoided if a credible job is to be done in the teaching of these topics. However, there are standards and procedures for minimizing the difficulties that too often accompany the study of controversial topics. Teachers and coordinators must take care to develop a rationale for the study of peace and nuclear war, and to use teaching techniques that are inclusive, rather than exclusive, of the various advocacy positions in society on the issue. Students must never become unwitting pawns in the process of indoctrination, no matter what viewpoint is being promoted.

A final word of caution is in order. In the pursuit of balance and objectivity, teachers must be wary of robbing the vitality from the issue at hand. Peace and nuclear war are topics of great intensity and emotion because they speak to the highest aspirations of humankind--to the issues of life, death, and the quality of each. In a letter com-

menting on the initial reports from the Wingspread Conference on Nuclear Arms Education in Secondary Schools, Kenneth Kickbusch (1985) warned that "Unless NCSS and social studies educators are willing to cast nuclear arms and other social issues in terms of ideology and interest, values and assumptions, the persistent struggle for 'balance and objectivity' will render impotent both the study of such issues and the student-citizen." The study of peace and nuclear arms must always engage students in the realities of the debate raging in the society at large, no matter how controversial, so as to prepare them for their future role as decision makers.

Chapter 4

NUCLEAR WAR EDUCATION AND PEACE STUDIES: HOW TO TEACH AND WHAT TO TEACH

Before examining what to teach in a nuclear war or peace education class, it is important to look at how to teach these topics. Three questions face the teacher who starts to select the content for such a class. What kind of materials should be used, where do personal beliefs and opinion belong, and what is appropriate to be taught at different ages? Critics of nuclear war and peace education fear that biased materials will be used, that teachers will indoctrinate students with their personal views, and that children will be unnecessarily scared by inappropriate information. These are valid concerns and teachers must sincerely examine their goals and objectives when teaching content and issues related to peace and nuclear war.

Biased vs Unbiased Materials

Material selection poses a problem for the teacher. There are two viewpoints on what kind of resources should be used. Some believe that unbiased, value-free materials should be used so as not to influence student opinion. Others believe that as long as students are taught critical thinking skills and methods, they can learn from biased types of materials. In looking at available materials and curricula, there are few materials that are unbiased and value free. We do not live in a world that is void of opinions. Newspapers, textbooks, and people's opinions express endless ideas, beliefs, and viewpoints. Students cannot be isolated from the real world, and therefore should be able to develop skills to detect points of view, frames of reference, and propaganda. It is very difficult for an educator to use value-free materials if he/she is going to address the issues of nuclear war and peace. These topics are controversial in nature and a curriculum limited to rote memorization of nuclear war vocabulary words is almost as inappropriate as no education on the subject at all. The challenge to the teacher is not in finding unbiased materials or hiding personal opinion, but in helping children become critical thinkers.

Personal Beliefs

A teacher's personal beliefs about nuclear war and peace are a specific part of the curriculum. It would be difficult to teach while masking one's personal beliefs, and it would be unfair to students. If the teacher wants an open forum for ideas and opinions, his or her ideas belong there too. If the students know the viewpoints of their instructor, they can be better analysts of information. The teacher, of course, must allow a forum for all opinions as well as his or her own, to be expressed and challenged. Careful selection and presentation of materials must also be considered to ensure a fair representation to students. To demonstrate critical thinking, the teacher can model listening to opposite views, playing devil's advocate, and being open to new ideas. The teacher must be able to practice what is preached! In doing so, the student is less likely to automatically adopt or reject the views of the teacher.

Age Appropriateness

One of the first things that educators should be aware of and sensitive to is the age appropriateness of these topics. It will not matter how something is taught if the student is not emotionally or intellectually capable of learning it. One task for the teacher is thus to determine what students at a particular age can learn, and what materials and methods are appropriate for classroom use. This is why many peace education topics are more appropriate for the lower grades, and specific nuclear war content can be introduced at the higher grades.

Elementary level children will have a wide range of nuclear war information, half truths, and misconceptions. The role of the elementary teacher is to neither avoid nor go into great detail about these topics. Adults need be aware that children do not think like adults, and that some activities will be more appropriate than others depending on the developmental stage of the child.

William and Mary Wicker Van Ornum (1984) have written a book titled Talking to Children About Nuclear War. Using the works of Selma Fraiberg and Erik Erikson, they counsel parents on how to talk about their child's fears and feelings regarding nuclear war, depending on the child's developmental level. Their recommendations are also very helpful to teachers of elementary school.

The teacher of 3- to 6-year-olds can assure children that they are loved. He or she can protect them from inappropriate information about nuclear issues. Children in this age group think that they can influence objects and events, thus making things happen. They would feel responsible for an accident, illness, or divorce. Therefore, they must be protected from feeling responsible for any sort of violence or war. It would be wonderful if they could remain innocent and have no fear of nuclear war, but many are not this naive. Children three to six years old are trying to learn how to handle their emotions. Anger and violence can be particularly frightening and it is important for them to feel that adults are in control of themselves. It is not helpful or supportive for teachers to admit that they also have extraordinary fears about nuclear war. Teachers need to be approachable for questions and acknowledge the concerns of these children. Teachers should listen to questions and address answers only to what has been asked. Offering more facts or information than asked may be too much for the child to cope with. The truth, however, must always be told. Simple, positive, direct answers provide a child with better tools to handle life than half truths. Questions must be answered positively and with reassurance that children are loved and cared for and that adults are making the world safe for them. If children keep asking the same questions, the teacher should keep answering them. Children are only asking for assurance by repeating the question.

Children from six to twelve years of age gradually develop from concrete to abstract thinkers. Children of this age group have concerns that are personal and concrete in nature. Their fears center around their family, pets, and personal safety. If they have information about nuclear war and weapons, it projects into fears about their family's safety and who will take care of them. As with younger children, reassurance that they are loved and that people are in control helps them feel safe. In the primary grades, teacher-initiated nuclear war discussions are not appropriate. If the teacher creates an atmosphere where children can have the opportunity to voice their concerns if they choose to, children will let the teacher know through play, stories, and drawings if there are fears and concerns that could be addressed. For children of all ages, using communication skills such as reflective listen-

ing and question clarifying can help a child feel listened to and assured. All questions must be answered truthfully, and it is all right to admit to not knowing the answer. As children get older, their questions will change from seeking assurance to wanting specific facts and information. The activities the teacher chooses to meet these needs must make children feel connected, empowered, and hopeful--not isolated. Activities that build up human relations skills are more appropriate than abstract information. Children are able to understand others' points of view after seven to eight years of age, and this is why global and peace education fit so well into the curriculum for this age level.

Children in secondary school become more abstract thinkers. They are able to understand the concept of the future. They also have the ability to gather information and understand the concept of values. Secondary students can handle ambiguity and are able to see things in a context other than simple good and bad, black and white dichotomies. As students get older, the curriculum moves from concrete facts to hypotheses and theories. The middle-level teacher will spend more time with specific facts, studying other cultures, and nuclear vocabulary. Human relation skills should still remain important parts of the curriculum. At the senior high level, the teacher can teach nuclear war education specifically because students have more of the emotional and intellectual tools to deal with the reality of nuclear war and weapons.

How to Teach the Material

In choosing what to teach, the teacher of nuclear war or peace education has many resources available to provide content and a focus of study. In addition to commercial products, there are numerous teacher-generated materials, as well as curricula written by concerned organizations. Most of the content of these resources and materials share common themes. First, these curricula address the fears that come from living in a nuclear age and make children feel less isolated in their fears. Second, they allow students to see that adults are concerned and are working to prevent nuclear war. Third, students come to feel empowered to speak and act upon their views. And finally, the process by which the content is taught goes beyond providing mere facts and teaches critical thinking and human relations skills. An examination of these

processes and resources shows that nuclear war and peace education is not anti-American or propaganda for "freeze" campaigns and nuclear disarmament, but a subject area that teaches about issues and citizenship.

A nuclear war and peace curriculum that uses critical thinking skills should allow the students to:

1. Increase knowledge.
2. Heighten awareness.
3. Investigate divergent viewpoints.
4. Form their own opinions.
5. Complicate their thinking.
6. Pose problems and ask questions.
7. Examine values, beliefs, and attitudes.
8. Confront attitudes and prejudices that interfere with thinking.

Adhering to this list is crucial to adequately and fairly deal with peace and nuclear war education issues. Whether an elementary school teacher is using role plays or a high school teacher is discussing national security, to be responsible they must teach in a forum that allows critical thinking to be learned and practiced.

Teachers are familiar with imparting basic information--facts and vocabulary terms--to their students. In doing this they raise the level of awareness of a particular topic. For example, a student learning about the Progressive Movement might become more curious about political change movements in his or her own time. It is also hoped that in a nuclear war and peace education class there would be an appropriate increase of concern. For secondary students, the new level of concern may be about the dangers of nuclear weapons or trusting foreign countries. For younger children, there might be an increased awareness of the injured feelings of a child in playground conflict.

A curriculum should investigate divergent viewpoints and permit students to form their own opinions. Presenting all sides of an issue is the primary task in critical thinking, and it is a vocal fear of critics of nuclear war education that this will not be done. For example, students in a high school nuclear war class should know the different positions on defense strategies in order to develop their own personal beliefs. Fifth graders should be exposed to the different ways a conflict can be perceived in order to find a way to resolve it. The

teacher who does not cover a subject by examining all sides is committing educational malpractice. Conversely, a teacher who provides information that represents all sides, and who allows an open forum for discussion and exploration of ideas, is not indoctrinating student opinion.

The focus of nuclear war and peace education classes should "complicate student's thinking, not simplify it; it should educate, not indoctrinate" (Ringler 1984). Students are not critical thinkers if they look at simplistic solutions and answers to complex problems. A student who is trying to learn about inflammatory language as part of a peace curriculum will never comprehend the power of these words if the teacher only says it is not nice to call someone names. The student must realistically, yet safely, experience and be exposed to labels and accusations of prejudice. Our perceptions of the Soviets is another example of how teachers must complicate student thinking. How does a government respond to a country that has a strong peace program but continues to act like a belligerant? The more problems that are posed to students and the more questions that they are asked, the more they will be required to critically think and analyze their beliefs. Students may have to confront some personal attitudes and prejudices that interfere with effective decisionmaking and critical judgment. In doing so, they become model citizens, using critical thinking to form a political philosophy based on solid information gathering.

What To Teach in High School

In designing a nuclear war or peace studies course a teacher will generally have different content for each of these subjects. In this section, specific content will be outlined and discussed, keeping in mind the age appropriateness of the material.

There are many courses on nuclear war in various high schools throughout the nation and the content of these courses have much in common. The following list gives examples of topics that are standard for high school courses of this kind. The length of a course will depend on how much material is taught and to what depth it is covered, but, in general, a teacher is looking at a three-week to one-quarter long course. For a semester or year-long course, the teacher can mix and match any of the following topics.

Course One Topics

1. History of the first atomic bomb
2. Evolution of nuclear weapons and delivery systems
3. The arms race
4. International tensions
5. Deterrence vs freeze
6. Strategic defense
7. Effects of nuclear war

Course Two Topics

1. Physics of nuclear weapons and delivery systems
2. History of the arms race
3. Defense strategies and policies
4. Economic implications of the arms race
5. Moral and ethical implications of the arms race

Course Three Topics

1. Nuclear weapons and the arms race
2. The Cold War
3. Soviet studies
4. Language of war
5. National security and defense policies

Course Four Topics

1. History of the nuclear arms race
2. Effects of nuclear war
3. How a nuclear war might start
4. How to prevent a nuclear war

Course Five Topics

1. Different strategies designed to prevent war
2. Consequences of nuclear war
3. Civil defense
4. Economics of defense
5. Soviet studies
6. Preventing war

Course Six Topics (Jacobson, Reardon, Sloan, 1983)

1. Possibility of destruction of the planet
2. The destructive capacity of nuclear weapons
3. National security, more than military security

4. Deterrence vs arms control and disarmament
5. Global scope of the problem
6. Alternative security policies

A high school peace studies course can cover a broad range of subjects because the basic unit of study is the world and people inhabiting it. Nuclear war topics can well be a part of broader peace studies classes. Often, courses are organized around four themes: peace, social justice, economic well-being, and ecological balance. A logical requirement for a course would be an analysis of the questions: What is peace? What does it look like? Students need to be moved beyond the simplistic definition that peace is the absence of war or conflict. They need to learn that peace is an active process which, like nuclear war education, requires sophisticated thinking skills. The following topics are part of an elementary and high school peace education course.

1. Definition of peace
2. Communication skills (facilitation, group speaking, writing, listening, non-verbal)
3. Global studies and interdependence
4. Human rights
5. Environmental awareness
6. Justice
7. Violence and aggression
8. Nature of conflict
9. History of warfare
10. History of social change movements
11. Prejudice
12. Propaganda and language
13. Peacemakers
14. Alternate systems of security
15. Conflict resolution and personal styles of handling conflict

There are many issues, questions, and subjects to be found under the umbrella of nuclear war and peace education. The previously mentioned topics are very broad and are not specific in their goals and objectives other than to teach thinking skills that build citizenship. The next list of topics and questions can be used in discussions, for research topics, or as additional course topics. They are included because they are important subjects as well as thought provoking.

1. What do the Soviets and the United States have in common?
2. What, if any, are the differences between female and male attitudes toward war?
3. Can a nuclear war be won?
4. Why is there an arms race?
5. What are the institutional and economic causes of the arms race?
6. What is an individual's personal, moral, and political responsibility to his or her country?
7. What should be the role of a country's military in determining national priorities?
8. Is there an acceptable loss of life for the United States and the Soviet Union in a nuclear exchange?
9. What would be the justifiable reasons to use nuclear weapons? For a first strike? The defense of Western Europe?
10. What is national security? When is national security threatened?
11. Should one nation be "number one"?
12. What can new technology contribute to war and peace?
13. Do more weapons increase security?
14. What is the Soviet view of peaceful coexistence and detente?
15. Is parity a myth?
16. Is the arms race the problem?

Infusion of Curriculum

If a teacher does not have the luxury of teaching a nuclear war or peace studies class, there are many ways to infuse the topics into other classes and curricula. The infusion of the study of nuclear war or peace in another class must, of course, be compatible with its methods and objectives. This is usually easy to do because of the broad applicability of these subjects.

The Milwaukee Public Schools' Peace Studies Resolution of 1984 is a good example of how topics can be infused into pre-existing courses. Some of the following examples are taken from their program.

--The study of aggression, conflict, and violence, (personally, interpersonally, and internationally) can be studied in world history, U.S. history, sociology, psychology, literature, health, family living, and art history.

--The study of war and its causes can be studied in all history classes as well as in literature classes.

--The causes of contemporary international conflict can be studied in history classes.

--The evolution of weapons systems can be studied in world history classes.

--Global interrelatedness and global interdependence can be studied in world geography or other world studies classes.

--The study of radiation, its effects, and protection against it can be studied in physical science, physics, or biological science.

--The physics of nuclear weapons can be studied in physics, mathematics, or other physical sciences.

--The economic costs of arms programs can be studied in economics.

--The consequences of a nuclear war can be studied in biology, sociology, psychology, and ecology classes.

--The dropping of bombs on Hiroshima and Nagasaki can be studied in U.S. history, physics, literature, and world history.

Nuclear war and peace education have an inherent interdisciplinary nature. An ideal course would call upon the talents of teachers from many different areas to teach their areas of interest and expertise. It would also guarantee a diversity of opinions and ideas and provide a lively forum for discussion. Courses of this type are now being offered at several universities. Writers, historians, ecologists, political, and other scientists have written curricula and taught courses on nuclear war or peace and world order.

Middle and Junior High School

In the middle and junior high schools, nuclear war and peace education are less likely to be offered as separate electives or required courses. Often, they are taught in current events courses or are infused into other courses. If a teacher has a unit or course on war or peace, many of the topics mentioned in the high school offerings are appropriate,

but will be covered in less depth. The one area that is inappropriate, in general, is the topic of nuclear blast and radiation effects. Although children of this age love "blood-and-guts" types of information, most are not prepared to emotionally deal with the gruesome details of radiation sickness and death. The point is for them to know that a nuclear weapon has horrible results if used, not what the specific and more graphic results are. There are other topics which will be of interest to them that are more educationally appropriate.

This is the age level that children can understand the concept of the future, and nuclear war education and peace studies are often incorporated within future studies. Here, children can practice problem-solving skills and creative thinking in dealing with the problems of the future that exist in their lives currently. It is a positive approach and uses the natural idealism of early adolescence.

Many aspects of peace studies are already taught in the middle and junior high schools. World culture classes teach the ideas of global interdependence as part of the social studies program, but peace studies can also be part of science, literature, music, art, and even math classes. Utilizing a global perspective to teach about other countries can create an attitude that the earth is a precious and fragile planet and that there is a crucial need to care for it and all of its people. All curricula can help teach students to live with and accept differences and about the need to be concerned for each other's welfare.

U.S. history classes are the most common area where nuclear war education is found. There are many historic events that can include nuclear war issues as part of the curriculum. Studying the Yalta Agreement or the Cuban Missile Crisis can be places to teach Soviet studies or how the arms race developed out of the cold war. Conflict resolution, negotiation, elements of peace studies, and the biographies of acknowledged peacemakers can be blended with history curricula.

Adolescence is a time when peer relationships take on a new importance. Because students are interested in themselves and each other, this is a time when many elements of the peace studies curriculum can benefit students personally, as well as teach about civic responsibility. Courses that deal with human relations skills or conflict resolution can be pertinent to ongoing family and social life. Human rights,

prejudice, and propaganda can be relevant to students' lives at a time when they are exploring independence and relationships with others. These topics, which often are part of the social studies, can be studied in literature, health, and physical education classes as well. A citizen who is aware of prejudice, human rights, and the use of propaganda, and is able to solve conflicts in a non-violent manner, is an asset to any community.

Students in these grade levels benefit from activities and hands-on instruction. The use of simulations, games, case studies, research projects, art projects, group work, and interviews reinforce the skills learned in interpersonal relations, conflict resolution, and critical thinking. Teachers should be certain as they choose materials that they select age-appropriate activities and strategies.

Elementary School

Most nuclear war education is inappropriate for elementary age students. Students in fifth or sixth grade could understand nuclear war vocabulary or concrete facts, but there are subjects that will better prepare them for more sophisticated thinking later. Therefore, the topics included in peace studies better fit the needs of the younger child. The curriculum should deal with the here and now, the concrete, the familiar, and ordinary experiences in students' lives.

The following topics have been recommended by the Milwaukee Public Schools in their Peace Studies Resolution (1984).

--Affirmation of self and others
--Communication
--Respect for diversity
--Cooperative living
--Creative resolution of conflict
--Making choices and decisions
--Steps to effective problem solving (win/win problem-solving skills)
--Search for alternatives
--Global awareness
--Environmental awareness
--Cultural diversity

--Tensions in the world, cause and effect

--Understanding war and peace

--People who make a difference

--Solving global problems

There are other areas to address in peace studies. Children should be able to learn about anger and fear, prejudice, and stereotyping. As young children learn how to interact with one another, they should learn how to "fight fair." This means learning how to negotiate, to be assertive, and to empathize. Learning about group dynamics and group awareness can also help students learn cooperation and work more effectively in groups. One of the great resources available to teachers is the use of literature and song in providing an enjoyable vehicle to teach the many aspects of peace studies.

Classroom atmosphere is very important in helping students grow and experience the climate that allows for peaceful interactions, growth of self concept, and positive conflict resolution. The teacher and the environment must model the ways children are expected to act. The following questions ask teachers what roles they play in the classroom and what type of environment they create:

1. How are conflicts between children resolved? Between teacher and child?
2. How does the relationship with the teacher help children develop inner controls independent of the constant presence of authority?
3. What discussion opportunities are there for solving problems as a group or dealing with sensitive or moral issues?
4. What is the balance between critical thinking and a "right/wrong" focus?
5. What is the balance between cooperative and competitive values in school games or achievements?
6. What opportunities are there for children to share responsibilities for projects none could do alone?
7. How is a multicultural perspective being developed, either through appreciation of diversity within the classroom or exploration beyond?
8. In what ways are children encouraged to value the natural world of plants, animals, ecology, and health?
9. Are children developing a sense of success, competence, and trust in themselves as learners, thinkers, and decision-makers? (Dialogue: A Teaching Guide to Nuclear Issues 1982, 28).

The elementary school teacher has a wide range of options open for a peace curriculum. Many of the topics are part of school programs already. It is hoped that if children have the interpersonal skills to treat people fairly and to make wise and healthy decisions, they will be among those concerned about and active in protecting the planet from nuclear disaster in the future.

Some Helpful Hints

Debate. Debate in the classroom is a common social studies method. Debate fosters communication. With nuclear war education, however, there are drawbacks to using this method. All sides of an issue are not always treated or presented fairly. It promotes a "you/them" mentality that does not create an arena for expanding thinking but rather one of competition. An objective of nuclear war education is to have students consider other points of view in order to develop their own. Ideally, a student would suspend belief of any advocacy position, listen to facts and the policies derived from the interpretation of those facts, and then form their own opinions. If, however, students are defending a position, as in a debate, they are usually not concentrating on making a decision, or even honestly and openly hearing the other side. Panel discussions or open forums are better processes for giving equal time to all sides.

Vocabulary. Nuclear war vocabulary can be quite overwhelming. It is important to avoid getting bogged down in technical details. A general list of 15 to 30 words adequately covers what is needed to understand resource materials. The goal should be to develop thinkers, not memorizers.

Statistics. Hopefully, teachers will help their students deal with the use of statistics when providing information. If at all possible, the trap in which sides of an argument endlessly debate numbers and figures should be avoided. Statistics can be used to say or prove almost anything. A good discovery type of activity is to provide students with pro-nuclear freeze statistics and American Security Council statistics and note the discrepancies and different uses of the same information. By all means, warn students of the pitfalls of statistical data. Teach them skills for deciphering and comparing statistics--skills necessary for constructive participation in discussions of all sorts.

Blood and Gore. All age levels have a fascination for the more macabre and sordid aspects of things. Information on radiation and death from a nuclear war can be gross and violent. The emphasis should not be on the horrendous, but on what can be done about it and how we got to this point. By directing students away from the gore of it all, the teacher is being sensitive to those members of the class who might be disturbed by such details.

Ways to Overcome Teacher Limitations. Not every teacher has the background to jump into teaching a class about nuclear war or peace studies, but there are several resources not previously discussed that can help the inexperienced and, for that matter, the experienced teacher. The use of community lecturers is very helpful, and resources for these are advocacy groups, colleges and universities, and parents. It is important that a variety of viewpoints be represented if speakers are used. The teacher can also use reading assignments and collaborate with students in developing a working knowledge of various nuclear issues. There are many good curricula that can help a teacher who is just starting out. Teacher training workshops are beginning to be offered in some school districts and at various universities.

Summary

It is hoped that the information provided in this chapter will help teachers feel more confident and less threatened by teaching nuclear war and peace education. The content of these courses provides students with fertile ground to cultivate and practice critical thinking and citizenship skills. Children can also learn human relations skills to use throughout life. Whether found in a specific course or infused into other disciplines and topics, nuclear war and peace education will interest students and can help to create a generation of effective problem solvers. The quality of our future will rely upon the skills they have been taught.

Chapter 5

ANALYSIS AND EVALUATION OF MATERIALS ON PEACE AND NUCLEAR WAR

Introduction

One of the most important decisions teachers make is related to the selection of curriculum materials. As has been noted here and in numerous studies--most notably the SPAN reports (Current State of Social Studies 1982)--the text and other curricular materials form the basic structure within which most teaching takes place. This being the case, it is necessary and important to develop careful procedures for facilitating the selection of text and other print and non-print materials by teachers and district personnel. This is even more crucial in a subject area such as peace and nuclear war education that is open to close scrutiny by various advocacy groups in the community.

Because of its newness and apparent controversial nature, there are many curriculum materials for peace and nuclear war education that have been accused of possessing a biased perspective. Social studies specialists at the district level complained at the recent Wingspread Conference on Nuclear Arms Education in Secondary Schools of the problem of finding materials that offer students a balanced set of perspectives about these issues. There were also complaints of groups pressuring school personnel to adopt or include their particular materials. Such groups were accused of not being candid about their educational and political goals. In this environment, a process for evaluating and selecting materials becomes all the more vital.

Textbooks are the major form of print materials used in schools today, but few, if any, address peace and nuclear war issues and skills in a meaningful way. This has led to a reliance on supplementary materials for teaching these issues. These materials, like texts, must be subjected to careful scrutiny by school and community personnel so that programs are not open to charges of bias or indoctrination. The classic case of the failure to make a careful review is the controversy surrounding the Choices (1983) curriculum from the National Education Association, Union of Concerned Scientists, and Massachusetts Teachers Association. This curriculum has been attacked from numerous quarters as reflecting a strong pro-nuclear weapons freeze bias, and as being a

tool of indoctrination rather than structured inquiry. There is little question that this controversy highlights the need to carefully examine any curriculum materials prior to their inclusion in a school program for peace and nuclear war education.

What should materials for teaching about peace and nuclear war provide if they are to be used in a school program? This question was addressed at the Wingspread conference, and the following standards were proposed ("Nuclear Arms Education in Secondary Schools" 1985, 7-8).

1. A Valid Representation of Multiple Perspectives. All major positions and their underlying assumptions should be presented in a fashion that advocates and nonadvocates recognize as accurate and clear.

2. Presentation of Broadly Agreed-Upon Terms and Historical Events. The basic descriptive concepts (e.g., ballistic missiles) and historical occurrences (e.g., use of atomic weapons in World War II) accepted by all parties should be defined and described.

3. Placement of Issues in an Appropriate Context, such as historical, international politics, cultural and political diversity of societies, preservation of democratic values, economic impact.

The conference also addressed the types of approaches teachers should use in presenting nuclear war related content and skills. The recommendations include the following.

1. The approach should require students to engage in critical thinking: As in the study of any controversial issue, the approach should enable the students to engage in analytical reasoning for themselves.

2. The approach should provide the affirmation of empowerment and political efficacy: The approach should include an orientation acknowledging that the contemporary problem with respect to nuclear weapons and national security is the result of human activity and therefore can be resolved by the efforts of individuals and groups.

These guidelines stand as an affirmation of the principles of peace and nuclear war education as outlined thus far. They state that such education must provide opportunities for students to meaningfully interact with the vital issues of the day without being lead to predetermined conclusions. They state that students must have the opportunity to work with materials that challenge and broaden thinking, rather than restrict them. These guidelines give added credence to the notion that peace and nuclear war education need not be taught with unfair bias or be the focal point of controversy.

A Curriculum Materials Analysis System

With the previous guidelines in mind, there is need for a structured, coherent process for reviewing and analyzing the variety of curriculum materials on peace and nuclear war now being generated. Such a system need not lead a school district or teacher to a particular set of materials, but would instead allow various individuals to critique pieces of curriculum with common standards and questions. From this point, meaningful dialogue can commence on the tough issues related to final recommendation and adoption.

A system can take the emotion and controversy that surrounds peace and nuclear war education and channel it into an evaluation process that dignifies diversity of opinion without allowing diversity to create a form of "institutional gridlock." Too often, fear of controversy makes educators avoid the tough tasks of decisionmaking or it encourages them to take the path of least resistance, which can result in poor curriculum selection or deferring to less qualified individuals to make these important choices. With a materials analysis system, qualified groups and individuals with divergent viewpoints can come together with the common goal of finding and selecting materials that are pedagogically sound. As described below, such a system has already been developed.

The Peace and Nuclear War Education Curriculum Materials Analysis Form has its roots in the Curriculum Materials Analysis System used as part of the ERIC Clearinghouse Planning A Social Studies Program: Activities, Guidelines, and Resources (Davis and Haley 1977). This system has been used for a number of years in numerous school districts for the evaluation and selection of text and other print materials. It is a system that provides a wide array of items for different reviewers to look for and critique. These items include such mundane yet important considerations as quality of bindings and use of graphics, to the crucial questions of content and bias. The system forces all reviewers to look for similar characteristics in the curriculum being analyzed. After such analysis is completed, a rational and meaningful discussion can be held as decisions regarding final selection and adoption are made. The form that follows provides such structure for the field of peace and nuclear war education.

Using the Curriculum Materials Analysis System

Evaluation of curriculum materials should take place after teachers and other concerned professionals and community members have established a clear rationale for the inclusion of peace and nuclear war education in the school program. This being done, goals for the program should also be delineated and clarified, and the process of selecting curricula can begin.

Many factors must be considered in choosing curriculum materials. These include relationships to the program objectives and rationale, potential student interest, age appropriateness, opportunities for higher level thinking and skill development, levels of difficulty, teacher requirements, bias, and cost. As teachers and district coordinators begin to consider materials, they will doubtless find some that meet many, but often not all, of these criteria. Decisions will ultimately have to be made taking this into account.

The selection committee should include teachers, social studies coordinators, other coordinators as appropriate, principals, district level administrators, parents, and interested community members. A representative, though not unwieldy, group should be formed. Each of the group members should be instructed in the materials analysis system and be familiar with the course or district rationale for peace and nuclear war education. A process for teaching the use of the analysis system would be as follows.

1. Plan a workshop of 2-3 hours for teaching this skill. Provide posting paper, marking pens, masking tape, blank analysis forms, and sample curriculum materials.
2. Introduction. Explain the purpose of the workshop and begin by asking participants to brainstorm, in small groups, all the criteria they believe are important in selecting curriculum materials for use in a peace and nuclear war program. Ideas might include:
   - Elements and degree of bias
   - Opportunities for higher level thinking
   - Student activity focus
   - Emphasis on inquiry methods
   - Variety of instructional methods

- Opportunities for interdisciplinary study
- Valuing activities at each grade level
- Age appropriateness
- Creative thinking and problem-solving activities
- Conflict and conflict resolution approaches

The list should reflect program goals and rationale, as well as teacher, school, community, and student needs. These items provide the overall criteria with which to examine curriculum materials.

3. Give each small group a piece or two of curriculum to examine. From this cursory examination, each group should list from three to five of the most distinctive characteristics of its sample materials. Post the lists when groups have finished and discuss commonalities and differences that are evident in the lists. Can logical categories of characteristics be generated?
4. Distribute copies of the Peace and Nuclear War Education Curriculum Materials Analysis Form and review it with the participants. Explain that the information about sample materials will be recorded on this form, and that the forms will be used later as the basis for making decisions regarding selection and adoption of materials.
5. Ask small groups to spend 20-30 minutes using the form with a sample piece of curriculum. Assemble all of the participants and discuss any problems that arose. Note the importance of responding to the final questions that summarize the work of the analyst.
6. Several guidelines for making best use of this curriculum materials analysis system are:
   - Any piece of curriculum should be analyzed by at least two persons--preferably three--working separately.
   - Any supplemental materials (such as student workbooks, readings, or handouts) should be analyzed.
   - Analysis forms should be kept for future reference and as documentation that a structured process for curriculum selection was undertaken.
   - Local issues and concerns should be kept in mind as materials are evaluated and discussed.

7. When all analyses are completed, final selection can take place either by an individual or, on the basis of the analyses, by a committee.

After members of the committee are instructed in the process of using the curriculum materials analysis system, they should begin to look at sample curriculum materials. At this stage, few value judgments regarding the materials should be made. The task is to see whether or not certain elements are included in the materials. The debate over what elements should be included either has already taken place in the formation of the rationale and objectives, or will take place at the time when actual selections are to be made. The importance of carefully analyzing curriculum materials for use in a peace and nuclear war program cannot be overstated.

It is worth mentioning that the form to be used is designed for print materials, but can work well with non-print items as well. In addition, it must be stressed that the materials should fit the stated objectives and rationale for the particular peace and/or nuclear war program in which they are to be used. Many characteristics may be missing from a piece of curriculum, but that will only matter if those characteristics are important to the particular program being planned. A close fit between curriculum materials and program design is a primary goal of this process.

PEACE AND NUCLEAR WAR EDUCATION CURRICULUM MATERIALS ANALYSIS FORM*

General Instructions

For the most part, no narrative is required on this form. Feel free to make any comments you think are important to the selection process. There is an opportunity to summarize at the end of each section of the form. There will be times when items do not apply to the curriculum you are analyzing; mark those items "N/A." Review the scales below carefully before ranking items and materials. One scale asks for the coverage or quality of a particular item; the other asks for a ranking of the relative importance that you as the analyst give to the particular item.

Rate each of the items on the scale below for coverage or quality.

3 - excellent coverage or quality

2 - adequate coverage or quality

1 - inadequate coverage or quality

0 - clearly biased or without balance

N/A - not applicable

Rate each of the items on the scale below in terms of its importance to you as the analyst.

3 - very important

2 - moderately important

1 - not at all important

Name of Analyst_____ Date of Analysis_____

Title of Materials_____

_____

Publisher_____

_____

Author(s)_____

_____

Date of Publication_____ Price _____

_____

*Permission is granted to reproduce this form.

I. Product Characteristics

	Coverage/ Quality	Importance
A. Stated Objectives		
B. Defined conceptual framework		
C. Structured lesson plans		
D. Prepared student handouts		
E. Primary source data		
F. Student workbook		
G. Use and clarity of graphics		
H. Prepared tests		
I. Glossary		
J Bibliography		
K. Addresses of various organizations concerned with peace and nuclear war		
L. Readily infusible to existing curriculum		
M. Evaluation data available		
N. Age appropriateness of lessons		
O. Binding/construction		

Summary of Part I: _____

_____

_____

_____

II. Content

	Coverage/ Quality	Importance
A. History/chronology of arms escalation		
B. Basic vocabulary and terminology		
C. Effects of nuclear weapons explosions		
D. Coverage of different perspectives on nuclear weapons policies		
E. Civil defense issues		
F. Explanation of European and other allied concerns		
G. Nuclear weapons issues in different nations and world regions		
H. Economic issues related to nuclear weapons policy		
I. Relation of peace and nuclear war issues to other global issues		
J. Society and culture of the U.S.S.R. and other nuclear nations		
K. Impact of nuclear weapons policies on U.S. society		
L. Nuclear proliferation		
M. Cooperative efforts of the U.S. and Soviet Union (e.g., arms control treaties and trade relations)		

		Coverage/ Quality	Importance
N.	Cold War relations between the U.S. and the Soviet Union		
O.	Conventional weapons and warfare		
P.	Sources of conflict and means of conflict resolution		
Q.	Origins and causes of war		
R.	Definitions and conceptions of peace		
S.	War avoidance strategies		
T.	Alternatives to total war		
U.	Alternative visions of the future		
V.	Biographies of men and women who have worked with war and peace issues		
W.	Social movements for change and procedures for effecting change		

Summary of Part II: _____

_____

_____

III. Methods

	Coverage/ Quality	Importance
A. Critical assessment of primary sources		
B. Using key terminology		
C. Research opportunities		
D. Structured debates		
E. Structured discussions		
F. Opportunities for understanding the beliefs and opinions of others		
G. Critical thinking and higher-level skill development		
H. Use of non-written expression		
I. Opportunities for creative/ artistic expression		
J. Examination and use of literature		
K. Opportunities to find and react to bias in arguments and presentations		
L. Examination of multiple perspectives on peace and nuclear war		
M. Manipulation of charts, graphs, and maps		
N. Consideration of values and ethics		
O. Discussions of feelings		

	Coverage/ Quality	Importance
P. Civic participation/ opportunities to become involved in the community		
Q. Dialogue with parents and other community members		
R. Use of speakers		
S. Use of other media		

Summary of Part III: _____

_____

_____

IV. Overall Assessment

_____

_____

_____

V. Would you Recommend Adoption of this Material?

Yes ___ No ___

Explain your choice: _____

_____

_____

_____

Adapted and developed by John Zola and Jaye Zola.

Summary

The Peace and Nuclear War Curriculum Materials Analysis Form focuses on issues directly related to this content area. It is important to remember that issues of sex equity and multicultural balance are also important when selecting curricula. Teaching materials of high quality are sensitive to various groups in America's diverse society.

The form is lengthy and demands that analysts carefully and completely review each piece of curriculum that is being considered. This full review will facilitate an appropriate final selection and should stave off later criticism that poor or biased materials are being used in the peace and nuclear war program. This proactive process enables teachers in the program to have confidence in the materials they will use. There can also be a strong sense of confidence that the materials fit the rationale and goals as outlined, that there will be a higher degree of ownership in the materials, and that fringe advocacy groups will have less of an opportunity to undermine the program because of poorly selected materials.

Chapter 6

IMPLEMENTING CHANGE FOR TEACHING ABOUT PEACE AND NUCLEAR WAR

Overview

To desire the implementation of peace and nuclear war education does not mean that such implementation will take place. Schools are remarkably resistant to change, especially change that is perceived as being political or controversial. Peace and nuclear war educators need to recognize these realities, learn from past efforts at curricular change, and plan for the careful implementation of their programs.

Schools, as a part of the larger society, are primarily reactive institutions and tend to have their agendas set by the society as a whole. The emphasis on math and science following the national concern at the time of the Soviet launch of Sputnik is a case in point. As concerns reach the front burner in society, they are more likely to receive greater attention in schools. The growing awareness and concern of the awesome destructive power of nuclear weapons, and the apparent fragile security they provide, is reflected in the current pressures for peace and nuclear war education in public schools. These pressures, although growing, are still relatively small and uncoordinated across the nation. If meaningful change is to occur in this area, a concerted effort must be made by educators, parents, interested community members, and others.

An implementation process for peace and nuclear war education is needed that is well thought out, sensitive to the lessons of previous change efforts, reflects current research on the process of change in schools, and is flexible enough to have applicability in the diverse communities across the nation. Haphazard efforts at change are doomed to failure and are likely to hurt the goals of peace and nuclear war educators in the long run. However, even the most carefully planned and well-intentioned implementation strategies are not automatically successful. Peace and nuclear war educators must learn from the successes and failures of the past to create implementation plans that have a strong chance of succeeding.

Finally, it is not the intention of this work to delineate one implementation approach and recommend its use in all situations. Rather, an attempt will be made to outline critical factors and key elements

that change agents must consider as they go about the process of implementing peace and nuclear war education in their schools or districts. The basic dynamic of change is that what might work in one locale is not guaranteed to work somewhere else. Yet, the critical attributes of the change process can be presented as elements that can increase the likelihood of successful change.

Past Efforts at Change in the Social Studies

Perhaps the most researched innovation in the social studies in the recent past has been the efforts directed at implementing the "new social studies" in the 1960s and 1970s (see Hertzberg 1981; Hahn 1977; Anderson 1982; Sikorski 1976). The new social studies were curricular innovations based on extensive research, large sums of money from the federal government, apparent careful planning, and demonstrated effectiveness. Despite these assets, the worthy goals of the new social studies were never fully realized. Researchers soon set out to discover why most of these seemingly valuable and effective innovations were never widely accepted. A number of lessons relating to the change process can be gleaned from this research, as follows.

1. Change agents failed to either account for or seriously consider the impact of the culture of the school on the change process. If culture is simply defined as the ways of living of a certain group, then schools are certainly a culture unto themselves. Schools have defined roles, delineated duties, rituals, set hierarchies, traditions, and a tendency to maintain that which seems to work and has "always been there." This makes schools relatively resistant to change both from within and without. The resistance comes from such factors as a lack of administrative support, a desire not to rock the boat, and perceptions that change would not fit the existing structures or needs of the school or would violate sacred boundaries that have long been maintained by individuals within the school.

The promoters of the new social studies appeared to neglect the importance of the culture of the school as a formidable barrier to change. It was assumed, in fact, that changes in the culture of the school would flow from changes in the curriculum. Such was not the case. In retrospect, what actually occurred was the imposition of the

values, norms, and aspirations of one culture--namely that of the university or development laboratory--onto that of the public schools. This one-way transfer proved to be less than successful. Finally, and perhaps of most interest to peace and nuclear war educators, invalid assumptions about teachers were made by the change agents. These included the assumptions that teachers acted as individuals; that the world of the teacher was exciting, challenging, and socially rewarding; and that, in general, teachers teach and students learn. All of these assumptions proved to be inaccurate. The society of the school within which teachers function mitigates against individual initiatives toward change; teaching is not so exciting; innovations are not readily accepted; and the majority of classroom time is devoted to the rigors and demands of schooling and not to the joys of learning. Curricular innovation and social change do not easily flourish in such an environment.

The lessons from research on the culture of the school and change can perhaps best be summarized by two analogies. The "iceberg" image portrays educational reformers as a visible minority above an invisible mass of teachers. The "ripples on the lake" image portrays the school as a lake that is undisturbed underneath by reform on the surface. Peace and nuclear war educators must look at the lessons learned from analysis of the nature and impact of the culture of the school and integrate them into planning for curricular change.

2. The issue of demand was not carefully addressed by the change agents involved in the new social studies. Without a clear demand from classroom teachers, any innovation faces an uphill battle for acceptance and implementation. The notion that materials and innovations will sell themselves to a skeptical and perhaps resistant audience was not borne out in practice. It appears that the demand for the new social studies came primarily from university professors and, in some cases, the administrative level in school districts. Only a few teachers and a similar proportion of the public expressed a need, and thus a demand, for the innovations developed by the new social studies. Peace and nuclear war educators must carefully examine the breadth, depth, and location of demand for their programs in particular schools or districts.

3. Not enough teachers were involved in the innovations brought about by the new social studies, and too few were involved in the dissemination phases. Vehicles commonly used to bring about change included inservice instruction, summer institutes, and liaison between university developers and local school personnel. These strategies, it would appear, were not sufficient to create the widespread change envisioned by the promulgators of the new social studies. Again, the pervasive and oppressive culture of the school that mitigated against all but a few committed educators choosing opportunities for professional growth can be pointed to as a culprit in frustrating efforts at change. In addition, change often came from the outside and too little consideration was given to teacher opinions of what would and would not work in the specific--and personal--environment of individual classrooms.

Although simplified, an understanding of these basic flaws in the implementation of the new social studies can be extremely useful to peace and nuclear war educators who hope to achieve a more complete and lasting institutionalization of their curricula. Specific lessons for consideration would include the following.

1. For change to have a chance of success, the prevailing culture of the schools must be examined and addressed by the change agents. The reasons that teachers are resistant to curricular or process changes must be delineated and then dealt with in a meaningful and honest fashion. Schools, as large institutions, have both obvious and less obvious avenues for change. These avenues must be identified, power centers must be located, and existing mechanisms for change supported.

2. Teacher attitudes toward change in general, and change toward implementing peace and nuclear war education in particular, must be examined. Teachers are generally resistant to change because it upsets stability and the established order of things. Thus change is often a disquieting experience no matter how positively the alleged outcomes might be described.

3. The issue of demand must be addressed. Peace and nuclear war educators must work to develop a sincere and broad-based demand for their goals and programs. Demand is a function of need; teachers must be carefully and sensitively brought to a point where they begin to see that there is a need for the materials, processes, and outcomes found in peace and nuclear war education programs.

4. Gradual movement towards acceptance of peace and nuclear war education should be the goal of change agents in this area, rather than instantaneous revamping of the structure, content, and processes of modern education. As noted, change is threatening. The fear of change can be minimized through an incremental process that uses the existing networks within a school, that respects the needs of various advocacy groups within the community, and that builds on successes that make individuals feel positively about themselves and the innovations being promoted.

5. There are already pockets of support for peace and nuclear war education in schools and communities across the United States. These sources of support must be identified, nurtured, and integrated. The work of a local group can be fused with the existing efforts of a specific teacher to produce a base of support for greater infusion of peace and nuclear war education. Many individuals and groups can have separate agenda and varied goals, yet still provide a nucleus around which change efforts can revolve.

6. The teacher must be the focus for any curricular innovation. In working with teachers, the change agent must be aware of and respect teachers' perspectives before attempting to generate change in outlook or behavior. No matter how pervasively an innovation might be accepted at the district or administrative levels, it is the teacher who will either breathe life into a proposed change or condemn it to certain failure. Teachers must be worked with, not dictated to or browbeaten with the latest research findings. Ownership at the classroom level is a key for the successful implementation of peace and nuclear war education.

A final lesson learned from the experiences of the new social studies is that many innovations can have undesirable elements that may cause some individuals to resist the particular change under any circumstances. These elements might include a perception that the change is not relevant to the school program, that it is inconsistent with user values, that it is too radical, or that the source of the innovation has little credibility. Such opinions will stymie even the most carefully implemented programs. Peace and nuclear war educators must recognize that they will never satisfy everyone in the educational community and

not let that fact stand in the way of a well thought out and carefully conducted implementation process.

Models of the Change Process

Although it would appear that the change process in education has been a rather haphazard and chaotic one, such is not in fact the case. Havelock (1973) has outlined clear models of the change process as practiced both in and out of the field of education. These models provide strategies for change, each one having specific strengths but all sharing certain common features. Peace and nuclear war educators can draw from the work of Havelock and others in determining the optimal strategies for implementing peace and nuclear war education in schools. The three models Havelock presents are the Problem Solving Model, Social Interaction Model, and the Research, Development, and Diffusion Model. A brief description of each model will precede suggestions on the use of the models by peace and nuclear war education change agents.

The Problem Solving Model sees innovation as a part of the problem-solving process that is happening inside the user or potential client. The model begins with an articulation of the needs of the user that are then translated into a problem statement and diagnosis. After the problem is defined, a search and retrieval of information is undertaken with the goal of finding or formulating an innovation that can then be adapted, tried out, and evaluated for its effectiveness in satisfying the original need. The focuses in this model are the user, the user's needs, and the user's willingness to satisfy those needs. Outsiders fulfill the roles of consultant, facilitator, and resource generator. They provide information, ideas, and processes for the problem diagnosis and the development of the innovations. The user's needs provide the only value stance for the change agent. In this situation, ownership of the potential innovation can be quite high as the impetus for change should be coming from the ultimate consumers of the innovation. A premium is placed on internal resources, self-initiated and applied innovation, and non-directive outside change agents.

The Social Interaction Model emphasizes the patterns and processes by which innovations diffuse through a social system. Innovations in this model are seen to be relatively fixed and concrete, such as a set

curriculum package or inservice program. Five generalizations characterize the social interaction model.

1. The user belongs to a network of social relations that influences his or her adoption behavior. These social relations could be a local advocacy group, a teacher's organization, or club of some sort.

2. One's place in the network predicts the rate of acceptance of new ideas. Those on the periphery of the network or who are isolated from the group will be later and slower to adopt the innovation. Those more central will more quickly and readily accept the innovation.

3. Informal personal contact is a vital part of the influence and adoption process. The "back fence" phenomenon of change cannot be underestimated.

4. Group membership and reference group identification are major predictors of individual adoption. The more one sees oneself as a member of a group that advocates some form of innovation, the more accepting one will be of that innovation.

5. Diffusion through a social system follows a predictable S-curve pattern--a very slow beginning, followed by a period of very rapid diffusion, followed by a long late-adopter period.

The best example of this model is the county agent system in American agriculture. Word of innovations flow from the county agent via word of mouth, personal contact, and the experiences of satisfied users. Although perhaps less structured and orderly than other change models, the social interaction model has a distinct strength in its ability to promote change through non-threatening and highly personal channels.

The Research, Development, and Diffusion Model is highly systematic and is used in industry and agriculture as well as education. Again, five assumptions underly this model.

1. There should be a rational sequence in the evolution and application of the innovation. The sequence includes research, development, and packaging before widespread dissemination takes place.

2. Planning--usually on a massive scale over a long time span--must take place.

3. There must be a division and coordination of labor that facilitates the rational sequence and long-range planning.

4. The model assumes a more or less passive but rational consumer who will accept and adopt the innovation if it is offered in the right place, at the right time, and in the right form.

5. There is an acceptance of high initial development costs prior to dissemination because of the anticipated long-term benefits in efficiency and quality of the innovation and its suitability for mass dissemination.

The process of the research, development, and diffusion model flows from basic research to applied research, to development and testing of prototypes, to mass production and packaging, to planned mass dissemination activities, and finally to the user. Obviously the needs of the user are considered in this model, but they play a significantly different role than in the other two models. In essence, the needs are defined by the developers of the innovation who then put together a package that is tantalizing enough to tempt the potential user. This orientation can lend itself to change on a vast scale if the innovations are of perceived quality and usefulness.

Each of these three change models has certain strengths and weaknesses, especially as they pertain to peace and nuclear war education. The problem solving model lends itself best to the aspect of needs and ownership in the process of implementing peace and nuclear war education. If the need for such curricula is clarified, experts from within and without the system can go about creating programs to meet such needs. After there is a clear demand to fulfill, whether at the classroom, building, or district level, the process of searching for and ultimately installing appropriate curricula can begin.

In Milwaukee, the passage of a resolution promoting peace education by the school board at the urging of many teachers set a study group in motion that delineated specific learning outcomes (needs) and procedures for achieving those outcomes. The process of innovation--of implementing the peace education resolution--had a relatively high degree of ownership because the need came from the client base and had the initial endorsement of the highest levels of the administration. Such widespread ownership bodes well for long-term acceptance of peace education.

The social interaction model finds its strength in the exploitation of existing networks of peace and nuclear war educators and those inter-

ested in promoting peace and nuclear war education. In many communities, there are groups and organizations of teachers, parents, activists, religious leaders, and others who are working to promote education that more realistically prepares young people for living in a nuclear age. These people provide a powerful lobbying force and network for the promotion of peace and nuclear war education. In addition, teachers who are now engaged in this curricula influence others to try new materials and outlooks. Educators for Social Responsibility has created such networks in numerous communities where teachers and others share effective peace and nuclear war curricula, strategies, and resources. The social interaction model is strongest in its low-key, informal structure that seeks less to browbeat than to influence through successful example and personal contact. Peace and nuclear war educators need to foster and work carefully with these networks as vital allies in bringing about the acceptance of peace and nuclear war education.

Large-scale change requires, at some point, large-scale planning and resources. The research, development, and diffusion model can provide such planning and resources in the efforts to implement peace and nuclear war education. One example is the "National Security in the Nuclear Age" project being undertaken by the Arms Control Association. This project will provide, on a national level, handbooks for teachers on specific national security topics, curriculum guides for teaching national security content in several traditional high school course offerings, educational technology to support classroom use of the materials, a center for national security education, workshops for educators, and widespread dissemination of program materials and related products. Once the materials are produced and widely available, school districts that express an interest in peace and nuclear war education will have a wide array of effective materials from which to draw. In addition, the research, development, and diffusion model can be useful to peace and nuclear war educators in its use of demonstration projects, evaluation of program materials, and effective packaging of curriculum materials. Effective demonstrations of peace and nuclear war materials can answer concerns of skeptics and show the range of possibilities inherent in peace and nuclear war curricula. Evaluation, both formative

and summative, is vital in giving peace and nuclear war education a credible base upon which to stand as proponents push for adoption of various materials and programs. If the worthiness and effectiveness of an innovation cannot be clearly demonstrated to school district personnel, it becomes extremely difficult to urge adoption of the innovation. The research, development, and diffusion model uses evaluation to demonstrate effectiveness of the materials and as a base from which revisions can be made. Finally, packaging of materials is recognized as important by this change model. For good or ill, our society is image conscious and teachers are no different from their neighbors. Carefully packaged materials are not just showy, they recognize the needs teachers have for clear materials, ease of use, and care in construction. Such are not unrealistic needs, and peace and nuclear war educators must recognize these realities as they construct and disseminate curriculum packages.

The focal point in these models for peace and nuclear war educators is institutional change--that is, change at the building and district levels. There is considerable overlap in these models and one general process can be extracted by relating all three to the goal of institutional change. Such a basic change model (Sikorski 1976) would include:

1. Need definition. This is determined at the appropriate level through a variety of needs assessment procedures. Without a demonstrated need for innovation, the change process faces an extremely low probability of success.

2. Invention. Materials and procedures to meet the stated needs must be created, located, and adapted. Conceptualization and development can take place within the local community or be assisted from without. Local involvement in some fashion is crucial for ultimate success in adopting the products.

3. Dissemination. The client base must be made aware of the innovations through a variety of vehicles including networking, existing communication channels, and meaningful involvement in the dissemination process.

4. Adoption. After awareness of the innovation has occurred, the ultimate decisions related to adoption must take place. This is truly a local choice as illustrated through the impotence of external and "top-

down" efforts at change with the new social studies. The initial process of ownership is begun at this point, most significantly influenced by perceptions of how the decisions to adopt were made.

5. Implementation. Adoption does not guarantee implementation. It is at this point that the change agent faces the difficult task of fostering the ownership so important for acceptance of innovation. If the prior steps have been sensitive to the needs and concerns of the client base, this task is greatly simplified. Inservice training, workshops, collegial interactions, material dissemination, and networking are all tools for bringing about successful implementation.

6. Fidelity. This is the process of getting the best fit between the innovation and the adopting institution. Adaptation of materials, revision reflecting specific local concerns, and tinkering to make the innovation work for the student population are all means of achieving fidelity and, ultimately, cementing the sense of ownership.

As can be seen, elements of each change model are incorporated into this scheme of basic change. Peace and nuclear war educators must be sensitive to the steps involved in creating meaningful and long-lasting change. Cutting corners can result in a more resistant client base or a less than comprehensive installment of peace and nuclear war related content and processes. Time, obviously, becomes a key component in this process. Change agents must be willing to wait as new perspectives are challenged, analyzed, toyed with, and, finally, seen to be valid. Haste, too often, results in the formation of defensive postures and rejection of change, however worthy.

Peace and nuclear war educators can best bring about the acceptance of the innovations they propose by considering several key implementation strategies. Leadership for change can be created by training district and building level administrators and content area specialists in the goals and processes of peace and nuclear war education. Users of the curriculum should be involved in the development and field testing of materials that are ultimately to be adopted. Teacher training and inservice programs with the actual materials are vital to the acceptance and appropriate use of peace and nuclear war curricula. Initial involvement in peace and nuclear war education should be voluntary and incentives should be provided for those who choose to work with the new cur-

ricula. Mandated change should only follow a period of experimentation, revision, and acceptance of the innovation.

Finally, and perhaps of greatest importance to peace and nuclear war educators, is organizational development as a focus of the change process. Conditions supportive to change must be created in schools and districts if true innovation is to be realized. A supportive structure for individual implementation of peace and nuclear war education must involve administrators who are willing to defend a teacher against criticism that controversial issues are being raised in the classroom, and who will provide necessary supplemental funds for new materials. These, and similar supportive actions, speak clearly that the innovation is beneficial to the school and make others take notice of the direction in which that instruction is headed.

Organizational development also entails challenging the ways that schools function in terms of power relationships and problem solving. An overriding goal of peace education is to promote new modes of thinking in conflict situations, and the school structure must support and help develop these new modes of thinking. If the explicit curricula promotes dialogue and understanding of divergent views, and a hidden curricula--as revealed through teacher and administrative actions--shows little concern for dialogue and exhibits direct use of power relationships to solve problems, the student is less likely to fully internalize the goals of peace education. Change agents must work to help teachers of peace related curriculum understand that their actions need to correlate with the messages they are presenting in class to students. Peace education can only flourish in a peaceful, accepting, and openly communicative environment.

The Role of the Change Agent

Accomplishing the goals described above is a formidable task for the change agent involved in peace and nuclear war education. Several stages in the role of the change agent have been identified by Havelock (1973) and they are relevant to peace and nuclear war educators. The stages provide a sequential process for working with the target audience in gaining acceptance of a particular innovation. The stages identified by Havelock are:

1. Building a relationship between the change agent and the client. Trust, honesty, and integrity are important components in developing a positive working relationship, especially in an area as potentially controversial as peace and nuclear war education.

2. Diagnosing the problem has to occur early in the change process. As an outside viewer, the change agent is in a special position to offer new insights into definitions of the problems faced by the institution that is considering implementation of peace and nuclear war education. Problems might include gaining public acceptance for the curriculum, finding appropriate curriculum, determining the most likely locations for teaching peace and nuclear war related curricula, or planning for teacher training in concepts and processes related to peace and nuclear war education.

3. Acquiring relevant resources for addressing the problems identified in the early steps. Resources could include actual curricula or content and process experts who would train and work with teachers to develop their own materials.

4. Choosing solutions and adapting them to the specific needs of the organization. Few innovations, whether concrete like a curriculum package or abstract like a public awareness program, can be accepted without some form of adaptation to meet specific local needs. The process of adaptation allows the innovation to become specialized to the needs of the adopting group, thus promoting a sense of ownership in the innovation.

5. Gaining acceptance and ownership of the change. As outlined above, this stage is the most important and difficult for the change agent. Care must be exercised in each step of the adoption process as individuals actually decide whether they will view the innovation as positive or negative.

6. Stabilizing the innovation and generating self renewal. If the innovation is to continue, it must at some point do so without the assistance of an outside change agent. Structures need to be created so that the innovation is evaluated, refined, disseminated more widely, and seen as an integral part of the overall curriculum. The relationship between the change agent and the client must be terminated without jeopardizing the success of the innovation. To become too personally

allied with the innovation or to make the innovation's acceptance too dependent on personal charisma is to risk having acceptance fade when the change agent departs.

Change at the institutional level is a complex and difficult process to create, but it is not impossible for such to occur. Careful planning and patience, as well as utilizing the lessons that have been gleaned from past efforts at change, can all increase the likelihood that peace and nuclear war related concepts and methods will be accepted in public education.

Bringing about Change in Teachers

Implicit in all of the models of change discussed thus far is the critical role of the individual teacher in accepting or rejecting the proposed innovation. Peace and nuclear war educators need to understand the centrality of the individual in their efforts to gain widespread acceptance of their curricular goals. The Concerns Based Adoption Model (CBAM) (McCarthy 1982) is useful for understanding a set of stages that teachers move through when involved in innovation.

This model is based upon several assumptions regarding the change process and how individuals react to that process. According to the model, change is a process that takes time and is achieved in stages. The individual must be the primary target of the innovation. Change is highly personal, and the stages of change involve both perceptions and feelings of individuals concerning the innovation, as well as their skill in its use. Finally, staff developers need to diagnose their clients' locations in the change process and assess the state of change as they adapt strategies along the way (McCarthy 1982). These assumptions, although focusing exclusively on the individual, can be seen as complimentary to the previous models that explain change on an institutional level. Essentially, CBAM provides an outline for grassroots involvement in the change process. Such involvement need not be at odds with efforts at other levels. In fact, the efforts can be quite complimentary, with individuals being gradually assimilated into the change process while the institution is creating a climate where the changes can grow and flourish.

There are seven stages in the CBAM model:

Stage 0-Awareness: Little concern about or involvement with the innovation is indicated.

Stage 1-Information: A general awareness of the innovation and interest in learning more about it is indicated. Individuals seem to be unworried about themselves in relation to the innovation. There is a general interest in the innovation in terms of general characteristics, effects, and requirements for use.

Stage 2-Personal: Individuals are uncertain about the demands of the innovation, their adequacy to meet those demands, and their roles with the innovation. Uncertainty could revolve around potential conflicts with existing structures or personal commitment, financial or status implications of the program, and decisionmaking in the process.

Stage 3-Management: Attention is focused on the processes and tasks of using the innovation and the best use of information and resources. Issues related to efficiency, organizing, managing, scheduling, and time demands are priorities.

Stage 4-Consequence: Attention focuses on the impact of the innovation on students in the teacher's immediate sphere of influence. The focus is on relevance of the innovation for students, evaluation of student outcomes including performance and competencies, and changes needed to increase student outcomes.

Stage 5-Collaboration: The focus is on coordination and cooperation with others regarding use of the innovation.

Stage 6-Refocusing: The focus is on exploration of more universal benefits from the innovation, including the possibility of major changes or replacement with a more powerful alternative. The individual has definite ideas about alternatives to the proposed or existing form of the innovation (McCarthy 1982).

Essentially, the model moves from lack of awareness of the innovation to curiosity, individual concern, acceptance, adaptation, and finally ownership at a conceptual level. Identification of the stages of the individuals involved in the innovation is the first step in planning specific strategies for accomplishing the desired change. Individuals at Stage 1 are anxious to learn about the proposed innovation in a concrete fashion, and an approach that is too aggressive is likely to frighten potential allies away. Someone who is interested in the innovation and has personally accepted the legitimacy and efficacy of the innovation (most likely at Stage 3 or above) needs opportunities to

share concerns, ideas, and adaptations with other interested colleagues. Peace and nuclear war educators involved in bringing about acceptance of their goals must first address the appropriate issues for the many individuals ultimately involved in the innovation process. The CBAM model is one effective tool for conceptualizing how different individuals relate to the proposed innovations and how to move them to greater acceptance of peace and nuclear war education.

Summary

The process of change is an uncertain one at best. Lessons from the new social studies can help peace and nuclear war educators optimize acceptance of their curricular goals. Included in these lessons are the need to work closely with the adopting clientele, to avoid mandating change from above or outside, and to be sensitive to the culture of the school and rigors of daily teaching. Models for change provide outlines for peace and nuclear war educators as they begin to work with teachers, administrators, and district personnel. No one model can guarantee success; each has elements that are appropriate in different situations. All, however, stress the importance of considering the needs of the classroom teacher as innovations are planned, produced, disseminated, and adopted. The CBAM provides a specific structure for analyzing where on a continuum of acceptance an individual might be, and how to best meet the needs of that particular individual as the innovation is presented. These tools can increase the likelihood of peace and nuclear war gaining acceptance in the public schools of this nation.

Chapter 7

TEACHING RESOURCES

There are many materials available for the teacher of a peace and/or nuclear war education class. Organizations, publishers, and teachers are beginning to produce a wealth of activities, curricula, and teacher resource materials. This chapter will describe some of the resources that are available. Unfortunately, there are very few actual curricula developed by peace-through-strength advocates. This leaves a void in the resources available to teachers, especially since many sides of the nuclear debate should be presented to students. Not mentioned in this bibliography are some of the best curricula, which are being developed by local teachers. Educators should not neglect the resources that exist in their own area.

Abrams, Grace, and Fran Schmidt. 1974. Peace Is in Our Hands. Philadelphia: Jane Addams Peace Association. Elementary.

This is an excellent resource for teachers because of the lesson plan format which defines concepts, outlines activities, provides special teaching notes, and lists sources for media and literature. The activities are varied and interactive and are designed to build esteem, empathy, global understanding, and to handle aggressive feelings. The table of contents includes the following: "Identification of Physical Characteristics of the Human Species That Link the Human Family," "Examination of Human Feelings and Emotions," "Comparison of the Needs and Aspirations of the Immediate and Extended Family with Those of Families of Other Cultures," "Analysis of Ecological Needs of Human Passengers on the Spaceship Earth and Commitments Necessary for Survival," "Assessment by Students of Personal Understanding of War and Peace," "Examination of the Causes of War and Its Effects on the Human Family and the Environment," "Examination of Efforts of Organizations, Nations, and Individuals To Solve World Problems," "Efforts Needed To Bring About a World Based on Social, Economic and Political Justice," and "Supplementary Activities to Reinforce Peace Learning."

Barber, Jacqueline, Gigi Bridges, and Cary Sneider, eds. 1982. Nucleography: An Annotated Resource Guide for Parents and Educators on Nuclear Energy, War and Peace. Berkeley, CA: Nucleography. K-12.

This annotated resource guide provides information on nuclear related issues. In addition to references for articles, books, and films, it has annotated information on curricula, organizations, human resources, and research reports.

Becker, James M. 1985. Teaching About Nuclear Disarmament. Bloomington, IN: Phi Delta Kappa Educational Foundation. Secondary.

In this Fastback, Becker examines the history of war and militarism in American culture and how the images of the mushroom cloud and Spaceship Earth have ushered in a Global Age. Guidelines and resources for teaching about disarmament related topics are presented.

Bender, David. 1982. The Arms Race: Opposing Viewpoints. St Paul, MN: Greenhaven Press. Secondary.

This book provides a broad spectrum of viewpoints on the nuclear arms race. Four to six viewpoints are presented for four questions: Why is there an arms race? Do nuclear weapons provide security? Are nuclear weapons immoral? How can the arms race be stopped? Experts and noted public figures answer these questions. Bibliographies accompany each question.

Berman, Shelley, and others. 1983. Dialogue: A Teaching Guide to Nuclear Issues. Boston: Educators for Social Responsibility. K-12.

This book provides guidelines for introducing nuclear education into schools, age appropriate ways to talk with students about nuclear war, curriculum ideas, and a bibliography. It helps teachers feel competent about teaching nuclear issues through effective teaching activities and guidelines.

Berman, Shelley, and others. 1983. Perspectives: A Teaching Guide to Concepts of Peace. Boston: Educators for Social Responsibility. K-12.

This curriculum has many challenging activities to help students explore peace as an active process. Peace and justice, conflict resolution, peacemakers, obstacles to peace, and social change are the focus of activities for students at all levels. Lessons are varied, clear, and concise. The unit on "Peacemakers" is especially good for peace education.

Cannon, Jim, Bill Clark, and George Smuga. 1984. The Contemporary World. Edinburgh, Scotland: Oliver and Boyd. Secondary.

This book, intended for world affairs classes, is written to help students understand reasons for conflicts and the need for cooperation at all levels in world affairs. The first of the three parts of the book examines the beliefs of the superpowers as well as the issues and history of the arms race. The second part looks at cooperation in Europe, focusing on the European economic community. The concluding chapter discusses world cooperation through the United Nations with excellent information on the UN's role in keeping peace during the last 40 years. The authors have done an excellent job of integrating conflict, nuclear war, history, and current events into a very usable book for teachers.

Carpenter, Susan. 1977. A Repertoire of Peacemaking Skills. St. Peter, MN: Consortium on Peace Research, Education and Development. Elementary to college.

The major focus of this book is to help people develop the tools to respond more creatively to conflict and violent situations and to expand the range of peacemaking responses. Skills for peacemaking are listed in detail and practiced in situations, and examples of peacemaking efforts are analyzed. The table of contents includes: "Introduction," "Associations and Assumptions About Peace and Peacemaking," "Examples of Peace Efforts," "A Repertoire of Peacemaking Skills," "Learning Peacemaking Skills," and "Resources of Peacemaking Skills."

Dane, Ernest, B. 1985. National Security in the Nuclear Age: Booklist for Libraries and Public Education About This Issue. Available from the author at #4 Jefferson Run Rd., Great Falls, VA 22066. Adult.

The author has compiled an extensive list of balanced, up-to-date books and other informational materials on national security. In order to strengthen public education, Dane proposes to make resources available to the public by improving public library holdings. Specific strategies are recommended. The recommended books cover a wide variety of topics by qualified experts on national security.

"Education and the Threat of Nuclear War: A Special Issue." 1984. Harvard Educational Review, vol. 54, no. 3. Adult.

This journal features a group of articles by noted authors who write about the nuclear threat from the perspective of different disciplines and personal experiences. The work of specific teachers is highlighted in chronicles of their teaching experiences. The articles provide thoughtful reading for any educator concerned with nuclear issues and the classroom.

Judson, Stephanie, ed. 1982. A Manual on Nonviolence and Children. Philadelphia: The Nonviolence and Children Philadelphia Yearly Meeting of Quakers. Preschool to adult.

This manual presents theory and approaches that help to build a nonviolent atmosphere in the classroom, at meetings, and in school. Cooperative games and affective learning exercises are based on five elements that teach how to act nonviolently when resolving conflicts. Activities are written for adults and children.

Kreidler, William J. 1984. Creative Conflict Resolution. Glenview, IL: Scott, Foresman and Company. K-6.

Subtitled "More than 200 activities for keeping peace in the classroom," this book is written to help teachers increase their understanding and skills in conflict resolution. The book provides an effective forum for teachers to examine their own behavior and beliefs, and has many activities to create a classroom community that can reduce conflict and create the peaceful classroom.

Mayers, Teena. 1984. Understanding Nuclear Weapons and Arms Control. Arlington, VA: Education in World Issues. Secondary.

Assembled from documents published by the U.S. government, this handbook provides teachers with a brief history of the arms race, facts on basics of arms control, current status of negotiations, tables and diagrams on U.S. and U.S.S.R. arsenals, the effects of nuclear war, and civil defense. The book lists acronyms, terms, policies, and leaders. This is an excellent resource for teachers and students with its clear illustrations, diagrams, charts, and data.

National Security in the Nuclear Age. 1985. Washington, DC: Consortium for International Studies and the Arms Control Association. Adult.

National Security in the Nuclear Age is comprised of materials and training resources that focus on issues and content related to nuclear weapons, nuclear war, and national security policy making. Content specific handbooks for teachers on national security related topics and curriculum guides for infusing this content in the major social studies disciplines will be developed and distributed as they become available. In addition, workshops, dissemination, and a Center for National Security Education to support the project and interested teachers are components of this undertaking.

Ringler, Dick, ed. December 1984. "Nuclear War: A Teaching Guide." Reprint from Bulletin of the Atomic Scientist. Secondary to college.

Ringler discusses the need to institutionalize nuclear-age education in colleges and universities. Specific recommendations are made for major disciplines and academic areas on how to bring peace and nuclear war education into the college curriculum. Interdisciplinary, intersystem, and institution-wide programs are also examined as alternative ways to teach nuclear issues.

Sivard, Ruth Leger. 1984. World Military and Social Expenditures. Washington, DC: World Priorities, Inc. Secondary.

The purpose of this book is to provide data and statistics on the use of world resources for social and military purposes in order to assess spending priorities. Charts and graphs are excellent teaching resources, as are tables and maps. The book is updated each year.

Sloan, Douglas, ed. 1983. Education for Peace and Disarmament: Toward A Living World. New York: Teachers College Press. Adult.

This collection of articles is written for educators in hopes that they will seek ways to make peace an integral part of education. The book is a scholarly approach to the "whys" of peace education and a plea for a responsible commitment by teachers to insure survival through education.

Snow, Roberta. 1983. Decisionmaking in a Nuclear Age. Boston: Educators for Social Responsibility. High school.

It is the belief of the author that the classroom should be the place where students develop their abilities to make decisions and participate in a democracy. The curriculum encourages controversy, differing perspectives, and discussion. A wide variety of activities and materials are offered. The table of contents includes "Learning to Learn about Nuclear War," "On Violence," "Constructing a Value System," "Nuclear War and the Arms Race," "The Cold War," "Negotiating," "Complexities," and "Making a Difference."

Stanford, Barbara, ed. 1976. Peacemaking. New York: Bantam Books. High school to adult.

Subtitled "A Guide to Conflict Resolution for Individuals, Groups and Nations" this is a collection of a wide variety of articles, activities, and excerpts from literature. Chapter headings are "Resolving Conflict," "Coping with Aggression," "The Use of Force," "Reorganizing Society," and "Peacemaking is Everybody's Business." Teachers can adapt many of the graphics and readings for classroom activities.

A Strategy of Peace Through Strength. 1984. Boston, VA: American Security Council Foundation for Coalition of Peace Through Strength. Secondary.

In hopes that the United States will put internal partisan differences aside, this book asks Americans to work together to adopt a strategy to deal with Soviet expansionism through a policy of peace through strength. This book provides a valuable resource for a more conservative viewpoint. Soviet strategy, economy, and military power are

described. Also included is a section on strategies for peace, a speech by President Reagan showing support for this strategy, and the official Peace Through Strength Resolution. A videotape based on this book is also available from the same source.

Zola, John, and Reny Sieck. 1984. Teaching About Conflict, Nuclear War and the Future. Denver, CO: University of Denver, Center for Teaching International Relations. Secondary.

This teaching guide takes students from a basic understanding of conflict to the specifics of nuclear war and to discussions of possible future world scenarios. Activities include "The Language of Conflict," "Nuclear Freeze Debate," and "A Start at Stopping Nuclear War." A detailed resource section on the nuclear freeze is included in this manual. Activities are student centered and have detailed lesson plans and reproducible handouts.

Chapter 8

CONCLUDING CHALLENGES

The underlying premise of this work has been that peace and nuclear war education are necessary and desirable adjuncts to present curricula in the schools of the United States. The magnitude of the threat of war--and nuclear war in particular--the high profile of the debates over nuclear weapons policies, and the value placed upon an informed electorate in a democracy, all validate this basic premise. In light of the stated need for the implementation of peace and nuclear war related curricula, we present the following challenges for those interested in teaching about peace and nuclear war.

1. Those promoting the goals of peace and nuclear war education must familiarize themselves with both the content and processes necessary to credibly teach this information. An increasingly wide array of resources are available with which peace and nuclear war educators can educate themselves, including books, periodicals, and inservice programs.

2. The controversial nature of peace and nuclear war education must be recognized, confronted, and honestly addressed. Means to do so include credibly teaching a variety of viewpoints on national security issues, broadening understanding among individuals with conflicting perspectives, helping students see that divergent opinions are not necessarily wrong, and demonstrating that growth and change can come from enlightened dialogue.

3. Teachers of peace and nuclear war education must be equally well versed in the content and process of teaching this material and must take great care in selecting age-appropriate lessons for their students. The highest of standards must be adhered to in the creation and selection of all peace and nuclear war related teaching materials.

4. Advocates for peace and nuclear war education need to work diligently, patiently, and cooperatively to bring about the changes they seek. Recognition of, and respect for, the prevailing culture of the school is crucial, as it can be a powerful determinant of whether peace and nuclear war related education curricula are adopted and implemented.

5. Finally, changes in the culture of the school that are contrary to the goals of peace and nuclear war education must be pursued in a respectful fashion so that peace and nuclear war education is seen as a credible part of the school curriculum.

These challenges are made to all educators in hope that they may inspire action toward greater acceptance of the goals of peace and the elimination of war as an instrument of national policy. In an educational environment intent on increasing excellence and competency, it is vital that a voice exists that beckons a responsible perspective toward the needs of the global community instead of narrow, nationalistic aims. Such a voice is needed to push for competency in human interactions as well as in computation and written language. It is important for peace and nuclear war educators, whether addressing their local community or state boards of education, to promote an awareness that we live on an endangered planet that must change its modes of conflict resolution and problem solving if it is to survive. Students of all nations need to understand the futility of war and become aware that problems can be solved at all levels in nonviolent ways. Peace and nuclear war education is one realm within which these goals can be accomplished.

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Most, but not all, ERIC documents are available for viewing in microfiche (MF) at libraries that subscribe to the ERIC collection. Microfiche and/or paper copies of these documents can also be purchased from the ERIC Document Reproduction Service (EDRS), 3900 Wheeler Avenue, Alexandria, VA 22304-5110. For price information, consult a current issue of RIE or CIJE or write EDRS.

Journal articles are not available in microfiche. If your local library does not have the relevant issue of a journal, you may be able to obtain a reprint from University Microfilms International (UMI), 300 North Zeeb Road, Ann Arbor, MI 48106. All orders must be accompanied by payment in full, plus postage, and must include the following information: title of the periodical, title of article, name of author, date of issue, volume number, issue number, and page number. Contact UMI for current price information.

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